SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1911.

No. ~~[illegible]~~ 440.

ROBERT P. ALLEN ET AL., COMMISSIONERS, ETC., APPELLANTS,

vs.

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

No. ~~[illegible]~~ 441.

ROBERT P. ALLEN ET AL., COMMISSIONERS, ETC., APPELLANTS,

vs.

THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

MOTION TO ADVANCE.

JOSEPH M. HILL,
Counsel for the Appellants.

(22,889 and 22,890.)

JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C.

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1911.

No. 813.

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

vs.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, APPELLEE.

No. 814.

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

vs.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, APPELLEE.

NOTICE.

To MR. JOHN M. MOORE,
Solicitor of Record for the
Above-named Appellees:

You are hereby notified that the appellants in the above-entitled causes will present to the Su-

preme Court of the United States on Monday, October 23, a motion to advance these causes and set them for submission on the second Monday in January, 1912. A copy of said motion is herewith handed you and attached to this notice.

Given under my hand this the 7th day of October, 1911.

JOS. M. HILL,
Special Counsel for the State.

Copy of above notice, with the attached motion, received. Service waived.

J. M. MOORE,
Solicitor for Appellees.

IN THE

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1911.

No. 813.

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vs.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY, APPELLEE.

No. 814.

ROBERT P. ALLEN ET AL., RAILROAD COMMISSIONERS, APPELLANTS,

vs.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, APPELLEE.

MOTION.

Come now Robert P. Allen, George W. Bellamy, and William F. McKnight, Railroad Commissioners of the State of Arkansas, appellants herein,

by Joseph M. Hill, special counsel for the State, employed under acts of the General Assembly of the State of Arkansas directing the Railroad Commission to defend these and similar suits, and move this honorable court to advance these causes upon its docket and set them down for hearing on the second Monday of January, 1912, or as soon after that day as suits the convenience of the court, and for cause thereof say:

I.

On September 3, 1908, five trunk-line railroads operating within the State of Arkansas applied to the Honorable Willis Van Devanter, then one of the circuit judges of the Eighth Judicial Circuit, for preliminary injunctions against the Railroad Commission of the State of Arkansas and other parties named therein, seeking to enjoin the enforcement of the act of the General Assembly of Arkansas, approved February 7, 1907, providing a maximum passenger rate of 2 cents per mile for railroads over eighty-five miles in length, and from the enforcement by the Railroad Commission of Standard Freight Distance Tariff No. 3, a tariff fixing freight rates on all intrastate shipments moving in Arkansas.

Judge Van Devanter, after hearing, granted the preliminary injunctions. His opinion is reported at 163 Federal Reporter, 141.

Judge Trieber, sitting for the Circuit Court of

the Eastern District of Arkansas, subsequently granted similar preliminary injunctions in suits of all other railroads operating within the State of Arkansas, with the possible exception of a few small lines. The Railroad Commission of Arkansas, created under an amendment to the Constitution authorizing its being, and pursuant to statutes passed executing said amendment, is authorized and empowered to fix and regulate freight rates on all intrastate freight traffic.

Pursuant to said authority, the Railroad Commission of Arkansas, in the year 1900, put in force a general system of freight rates. An injunction was granted against those rates operating on two or more lines, the legislative authority seeming to have conferred upon the Commission only power to fix rates upon single lines. This defect in the creating law was amended in 1903, and immediately thereafter the Railroad Commission reenacted the system of rates promulgated in 1900. These rates, with a few minor changes, were in force from 1903, and upon single lines from 1900, until the injunctions against them in 1908. They were reissued in form known as "Standard Distance Freight Tariff No. 3." No application was made to the Railroad Commission prior to the application to Judge Van Devanter for a reduction of any of the rates in said Standard Distance Freight Tariff No. 3.

The General Assembly of Arkansas convened in January, following the injunctions issued in Sep-

tember, 1908, and an act was passed by it, which was approved January 28, 1909, empowering and directing the Railroad Commission to make defense to the aforesaid suits and appropriating money for the employment of counsel and accountants and defraying the expense of such defense and authorizing the Governor and Attorney General to select special counsel, who should, in conjunction with the Attorney General, be entrustetd with the defense of said suits brought against the Railroad Commission.

After the injunctions were granted by Judges Van Devanter and Trieber the railroad companies operating in the State of Arkansas put in force a schedule of freight and passenger rates in place of those enjoined. Shortly after the defense of said suits was authorized and directed by the General Assembly the Railroad Commission filed a motion in the circuit court to dissolve or modify the injunctions on the ground, *inter alia,* that the rates promulgated by the railroads were unreasonable and discriminatory, and that it was inequitable for the railroads to maintain unreasonable and discriminatory rates while the State-made rates were under injunctions.

The court found that the freight rates promulgated by the railroads were unreasonable and ordered the injunctions dissolved unless the railroads within a short time should promulgate reasonable rates and determined that rates producing revenue exceeding 33 1-3 per cent over the rev-

enue produced by the Standard Freight Distance Tariff No. 3 would be unreasonable.

The outcome of this decision was the "Court Tariff," which materially reduced freight rates put in force by the railroads and materially increased the freight rates promulgated in said Standard Distance Tariff No. 3. This "Court Tariff" was made effective for all intrastate traffic on all railroads which had secured injunctions, which, as stated, were all the railroads in the State of Arkansas with the possible exception of a few insignificant lines.

The decision on this motion is reported in 168 Federal Reporter, 720.

This decision left in force the injunctions against the legislatively-fixed passenger rates and the Commission-fixed freight rates, and substituted in lieu of the Commission-fixed freight rates the "Court Tariff." Subsequently all these cases were put at issue, but only two were tried. By stipulation of counsel and orders of court, testimony taken in these cases may be used in the other cases so far as applicable, and the other cases were continued pending final decision in these cases. On the 3d day of May, 1911, Judge Trieber, sitting in the circuit court, made perpetual the injunctions granted by Judge Van Devanter in these cases, and orders of court were made continuing the other cases, continuing the injunctions therein, and continuing in force the "Court Tariff" until the final decision in these cases.

On the 30th of June, 1911, the General Assembly of Arkansas appropriated money for the appeal of these cases to this honorable court, and on the 6th day of October, 1911, transcripts of the record in each of these cases were filed in this court, and the transcripts are now in the process of being printed.

The said perpetual injunctions restrained the Railroad Commission from enforcing any rate in Standard Distance Tariff No. 3, and restrained said Commission and all other parties, including the railroads themselves, from enforcing the act of the General Assembly of 1907, fixing passenger rates at 2 cents per mile. The act of the General Assembly regulating passenger rates and the acts of the Railroad Commission under constitutional and statutory provisions regulating freight rates are by said injunctions held inoperative and unconstitutional. This decision reaches all the freight and passenger rates in force in the State of Arkansas under authority of said State, and renders inoperative and void all State regulation of passenger and freight rates pending the hearing of these appeals. These appeals do not serve as a supersedeas and none of the laws of the State of Arkansas regulating passenger and freight rates are now enforceable.

The early hearing and determination of these cases by this honorable court is therefore a matter of vital interest and importance to the State of Arkansas, its officers and citizens, and all persons

who move freight within said State or who travel upon the railroads therein.

II.

The laws of the State of Arkansas provide for the assessment of railroad properties according to their true value, and provide for an equal and uniform assessment of all property. The amount of revenue received from the railroads through their freight and passenger rates is one of the elements of value to be considered in assessing railroad property for taxation. Owing to the injunctions herein restraining freight and passenger rates fixed by the State and the substitution of other rates in place of those fixed by the State, it is very difficult for the assessing authorities of the State of Arkansas to determine and fix the true value of the railroad properties within the State. The injunction bonds given at the time of the temporary injunctions provided for refunding to shippers and passengers the excess charge over the State-made rates in case the injunctions should be finally dissolved. This revenue, which will run into millions of dollars annually, is held in abeyance until it is finally decided whether it belongs to the railroads or to the shippers and passengers, and leaves uncertain and indeterminable the real amount of revenue received by the railroad companies pending the final decision of these cases, and leaves their proper taxation uncertain.

III.

Cases from Missouri, Minnesota, and other States involving in many respects questions involved in these cases are now pending on the docket of this honorable court, and the questions which are to be decided herein are not vital to the State of Arkansas alone, but to many other States of the Union.

Wherefore, the premises considered, the appellants move the court to advance these cases and set them down for hearing on the second Monday of January, 1912, or as soon thereafter as the convenience of the court will permit.

JOS. M. HILL,
Special Counsel for the State of Arkansas.

Service of this motion by delivering a copy thereof is acknowledged, and service of notice of the filing and presentation of this motion on October 23 is acknowledged. Time of service of copy of motion and of notice of presentation are waived and consent given to the presentation of the motion on October 23.

Given under my hand this 12th day of October, 1911.

J. M. MOORE,
Solicitor for the Appellees.

Appellees concur in the request to advance these causes and in so much of the statements contained

in the foregoing application as relate to the character of the subject-matter of the litigation, the importance of the issue involved, and the need for the speedy termination thereof.

J. M. MOORE,
Solicitor for Appellees.
MARTIN L. CLARDY,
Solicitor for St. Louis, Iron Mountain & Southern Railway Co.
SAM'L H. WEST,
Solicitor for St. Louis Southwestern Railway Co.

[Endorsed:] File Nos. 22,889 and 22,890. Supreme Court U. S. October Term, 1911. Term Nos. 813 and 814. Robert P. Allen *et al.*, Commissioners, etc., appellants, *vs.* The St. Louis, Iron Mountain & Southern Railway Company. Robert P. Allen *et al.*, Commissioners, etc., appellants, *vs.* The St. Louis Southwestern Railway Company. Motion to advance, notice, and proof of service. Filed October 17, 1911.

IN THE

Supreme Court of the United States

ROBERT P. ALLEN *et al.*, RAILROAD COMMISSIONERS ..... *Appellants*

v. No. 813.

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY..... *Appellee,*

AND

ROBERT P. ALLEN *et al.*, RAILROAD COMMISSIONERS ..... *Appellants*

v. No. 814.

THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY..... *Appellee.*

ABSTRACT AND BRIEF FOR APPELLANTS.

A CONCISE STATEMENT OF THE CASE.

NOTE.—All references in this abstract and brief are to the top pages of the printed record, unless specific reference is made to the indented pages which refer to the original record. All references are to the record in Case No. 813, Robert P. Allen *et al.* v. St. Louis, Iron Mountain & Southern Railroad, as that case contains all the evidence. Where the record in No. 814, Robert P. Allen v. St. Louis Southwestern Railway Company is referred to, it will be specifically mentioned as page in Record No. 814.

THE PLEADINGS.

The Complaint.

On the 18th of July, 1908, the St. Louis, Iron Mountain & Southern Railroad and the St. Louis Southwestern Railroad Company and several other railroads (not parties to this appeal), operating in Arkansas, filed bills of complaint in equity in the United States Circuit Court for the Eastern District of Arkansas, against Robert P. Allen and other members of the Arkansas Railroad Commission, and several individual citizens of the State, who have passed out of the cases. These complaints allege the creation, under constitutional amendment and statute, of the Railroad Commission, and the investiture of it with power to regulate passenger and freight rates on all intrastate traffic; and the provisions of the statutes providing various penalties to attach for failure to comply with the orders of the Railroad Commission.

The Bills aver that in 1904 the Railroad Commission put in force Freight Distance Tariff No. 2, prescribing freight rates and charges applicable to all classes and commodities between all stations in said State, on all railroads operated therein, subject to the Western Classification as adjusted to the traffic in said State by the Commission. That the rates therein promulgated, and certain amendments from time to time, continued in force until June 4, 1908, when Standard Freight Distance Tariff No. 3 was made effective. This tariff cancelled Tariff No. 2, and said Tariff No. 3 contained many of the rates and regulations contained in No. 2, and the changes and amendments since No. 2 was issued, and other changes and rates on classes and commodities, and was adopted in June, 1908. The Bills allege that all of the charges and rates prescribed in said Tariff No. 3, as well as in the preceding Tariff No. 2 aforesaid, were unreasonable, unjust, oppressive, discriminative, confiscatory and void, both in respect to said order as a whole and in respect to each and every rate, charge, tariff, schedule, classification, rule and regulation separately (R. pp. 2-6). The Iron Mountain Company alleges that its railroad equipment, property and franchises in use in Arkansas represented an investment of $40,906,572.00 (R. p. 5). The St. Louis Southwestern alleges that its investment represented $16,023,090.00 (R. p. 3, R. p. 814). The Bills allege that each plaintiff has exercised as great degree of economy in the use and operation of its railroad as was compatible with the interest of the public and with safe and efficient service to the public, and it only employed such officers, agents and employees, and expended such amounts in the maintenance and repair of its roadbed, tracks and stations and for new equipment of engines, cars and other appliances as were necessary to the operation of its road and the maintenance of said property, with due regard to its preservation and with safety to the public. That no unreasonable salaries or wages have been, or are now being, paid to any of its officers or employees (R. p. 2). The Bills allege in detail that various

specific freight rates are unreasonable and confiscatory (R. p. 4-8). Then the Bills allege that the roads are engaged in interstate commerce, and that the local rates of the several States through which they pass enter to a very large extent and have a controlling influence on the through rates charged on interstate shipments. The Bills allege that the State rates interfere with interstate rates; on a theory that interstate rates are made up of the sum, or a percentage of the sum, of the various intermediate local rates of each State through which the road passes (R. p. 8). As these allegations are unsustained, further attention to them will not be paid. The Bills also make an attack on the joint rates promulgated by the Commission (R. pp. 9, 10), but there is no evidence to sustain it and further reference thereto is omitted. The Bills then allege that on February 9, 1907, the General Assembly of Arkansas passed an act fixing the maximum rate of two cents per mile on all roads over 85 miles in length, and then allege that the Railroad Commission had adopted and promulgated the passenger rates as prescribed by the General Assembly, and charges that the revenue produced from such passenger rates was less than the expenses of the operation of the passenger service (R. pp. 11-13). The Bills allege that while freight and passenger rates have been reduced, the expenses of maintaining and operating each road have been increased, and many new burdens placed upon them by law, and that the earnings are insufficient to pay operating expenses and an adequate return on the property invested in the intrastate traffic (R. pp. 13, 14). There are other allegations in the Bills (R. pp. 14-21); some of matters not afterwards pressed, and others in amplification of those just mentioned.

The Answer.

The Railroad Commission on the 25th of July, 1908, filed its answer. The answer admits what may be termed the historical allegations of the complaint, and denies specifically the force and effect of the rates of which the plaintiffs complain; and denies that there are any unreasonable, unjust, oppressive, discriminatory or confiscatory rates, and denies that as a whole the system of rates is confiscatory; it denies the effect of various provisions of the statute complained of, wherein it was alleged the plaintiffs were denied due process of law in the promulgation of freight and passenger rates.

It admits the issuance of Standard Freight Distance Tariff but avers that said Tariff No. 3 was substantially similar to No. 2, adopted in 1904, and that No. 2 was a repetition in substance of the first Standard Freight Distance Tariff which was adopted on the 10th of April, 1900. It alleges that at different times during the history of the Commission technical questions were raised as to whether certain items were properly adjusted and it was necessary to dispose of such matters by rulings or construction. This being unsatisfactory, when Standard Freight Distance Tariff No. 3 was issued the Commission gave notice to all interested roads that it

would, at a meeting to be held on June 4, 1908, take up the question of adopting this tariff as a whole, and it was so adopted, thus disposing of many inadvertent discrepancies which had crept into the compilations previously issued; but the Commission states that there was no substantial difference between the freight rates promulgated in Standard Distance Tariff No. 3 and those in effect since April 10, 1900. The defendants deny that any of their rates are unreasonable, and deny that the plaintiff roads exercised economy in the use and operation of their property. The defendants deny that the plaintiffs practiced reasonable economy in the operation and maintenance of their roads, and allege that if the roads were properly and economically conducted that the revenue received from the rates promulgated by the Commission would yield a profit of 15 per cent on the property invested. The defendant Commission alleges that the condition of the commercial affairs of the country in 1907 was such as to furnish no criterion for other years; that if it is true that the earnings and expenses of the roads were the amounts alleged in the Bills for the year 1907, that such sums should not be taken as a criterion of the expenses and revenues of the roads in normal times, and set forth with some particularity the well-known panic of 1907, which caused such a serious stagnation and loss to railroad business. The defendants deny the allegations in regard to local rates affecting or interfering with interstate commerce, and deny specifically the various allegations as to the different rates, rulings or orders of the Commission being unreasonable or confiscatory. Defendants deny that the Act fixing the passenger rate at two cents worked any detriment to the plaintiff railroads; they aver that the traffic has so increased since the passage of said Act that the plaintiff railroads were not in any manner injured thereby, and that said rate produced sufficient revenue from the passenger traffic to leave considerable profit unless the plaintiff roads were unreasonable and extravagant in their management and operation and demanded profit on fictitious values. Defendants deny that the freight and passenger revenue will not produce sufficient to pay all of the expenses of passenger traffic and leave an adequate return on the property invested in it. All the other material allegations of the Bills are specifically denied (R. pp. 22-37 and in R. 814, 22-35).

The Temporary Injunction.

On the 3d of September, 1908, Hon. Willis VanDeventer, one of the Circuit Judges of the Eighth Judicial Circuit, granted a temporary injunction against all the rates in Standard Distance Freight Tariff No. 3, and against the passenger rates rates prescribed in the Act of the General Assembly (R. pp. 38, 39). Judge VanDeventer's opinion is found beginning at page 38 of record No. 814 and at page 40 in record 813. Judge VanDeventer stated that the proof disclosed the revenues actually derived by each railroad upon the application of these rates from its business in the State, and the revenues from

each class of traffic are so stated as to show separately the earnings from intrastate freight, interstate freight, intrastate passenger and interstate passenger traffic, and also disclosed the value of the property employed by the road in the traffic within the State, the taxes paid thereon, and the actual cost of conducting the freight traffic and the actual cost of conducting the passenger traffic. He stated that the first question for consideration was "How shall this cost be apportioned between the intrastate and the interstate traffic?" He further stated that the proof made it quite plain that the production of a given amount of revenue was attended with greater cost for intrastate business than for interstate business. In this case he found that the additional cost was at least 100 per cent on freight traffic, and 15 per cent on passenger traffic. Then he says (R. p. 41): "Undoubtedly these differences furnish a standard by which to apportion the total cost between the traffic which is intrastate and that which is interstate. Other standards are suggested, but the proofs indicate that none of them are as satisfactory or accurate as is the difference in cost in its relation to the revenue. That standard must therefore be applied, and this may be done in this way, taking the freight and passenger traffic separately: Increase the intrastate earnings by the ascertained percentage representing the difference in cost, threby ascertaining what would have been earned by the same actual expenditure in conducting the intrastate traffic, had it been attended with the same relative cost as the interstate traffic; then add the intrastate earnings as so increased, to the interstate earnings, thereby ascertaining what would have been earned by the actual expenditure in conducting both the intrastate and the interstate traffic, had they been attended with the same relative cost; then ascertain what proportion of this total represents the intrastate earnings, as so increased, and then ascertain the corresponding proportion of the total cost of the intrastate and the interstate traffic."

Motion to Dissolve.

On February 18, 1909, the defendants, the Railroad Commission, filed a motion to dissolve or modify the injunction, and alleged, among other matters, the following (R. pp. 56, 57): "These defendant assert that the filing of the bill in equity herein, seeking a temporary and permanent injunction, bound said plaintiff to do equity, as it was seeking relief in a court of equity, and, when said temporary injunction was granted restraining the enforcement of the passenger and freight rates upon the ground that said rates were unreasonable and confiscatory, the said plaintiff was bound by the principles of equity jurisprudence, to put in force, if it exercised its power, only reasonable rates, and it was not at liberty to avail itself of the injunction against the rates established under the law and put in force unreasonable rates. In violation of this settled principle of equity jurisprudence, the plaintiff has, since the rates established by the Commission and the General Assembly were temporarily enjoined, estab-

lished freight and passenger rates of all intrastate shipments, and said freight and passenger rates are unreasonable and exorbitant, and are destroying many of the industries of the State. And said plaintiff is maintaining interstate rates so low that the same amounts to a discrimination against the business and industries of the State of Arkansas. That it discriminates in favor of longer hauls of interstate shipments, under similar and like circumstances, against shorter hauls of intrastate shipment to the great detriment of the shippers and consumers of the State of Arkansas.

The tariff put in by the railroads since that injunction upon the leading articles of commerce in the State is an unreasonable increase. On grain there is an increase of 50 per cent over the Commission rates; on cotton 140 per cent over the Commission rates; on packing house products, 100 per cent; on coal, 35 per cent, on brick, stone and sand, 75 per cent; on lumber, 107 per cent; and on the various lines of merchandise, about 75 per cent. There is an average increase on the principal commodities of the State of 77 per cent over the Commission rate, which these defendants aver is unreasonable, extortionate and oppressive to the shippers of the State."

Defendants also allege that after the injunction was granted restraining the two-cent passenger rate, the plaintiff roads increased their passenger rates to three cents a mile and did not afford any better service while so doing, and alleged further that the plaintiff roads transport all persons who buy 2,000-mile tickets at two cents a mile while occasional travelers who do not buy such mileage books are charged three cents a mile, thereby materially decreasing the amount of travel.

The court found that the tariff put in by the railroads after the injunctions were obtained was unreasonable, and ordered that the freight rates, pending the hearing of these cases, to be charged by the railroads should not produce more than 33 1/3 per cent increase in revenue over that produced by Standard Distance Freight Tariff No. 3, and ordered that a tariff so formed be put into effect not later than June 7, 1909, on penalty of the dissolution of the temporary injunction (R. p. 65).

The defendant Commission set forth in said motion this:

IV.

Premature Suit.

"The defendants allege that the plaintiff has a plain and adequate remedy against any rate established by the Commission which is not reasonable and compensatory and should not be entitled to seek a remedy in a court of equity until it has exhausted its efforts to obtain a reasonable and compensatory tariff under the existing law, which affords it ample and complete redress against any injustice in the freight rates established by the Commission. That it is made the duty of the Commission—

"to hear all complaints made by any person, firm or corporation against any such tarii or charges so approved (by it); to hear the parties to the controversy in person or by attorney, or both, and may take testimony orally and in writing, and regulate the argument thereon and conduct the investigation of such complaints in such manner as to the Commission may seem best to arrive at the truth, and when any changes are made in the tariff notice thereof shall be given to the person or corporation to be affected thereby."

And it is further made the duty of the Commission in changing or fixing the rates, to take into consideration the character or nature of the service to be performed, the entire earnings of the railroad, the expense of operating same and the expense and value thereof. And the defendants assert the facts to be that when the first tariff was established by the Commission, in 1900, that it assured the plaintiff and all other railroads affected by it that, if said tariff did not produce a fair profit, the Commission, upon a showing so made, would readjust it so as to produce, if possible, for the plaintiff, a fair profit upon its investment. And such has been the attitude of the Commission from then until the present time, and is still the attitude of the Commission. That several small line railroads have applied to the Commission for relief against the existing rates, and, where the showing has been made of the justice of the application, the Commission has granted the same. That the plaintiff has not presented any complaint to the Commission, alleging that any rate, or the tariff as a whole, established by it was not compensatory and asking for an increase of any rate or of the tariff as a whole. That the Commission recognizes now, as it has always done, that no tariff, whether promulgated by a railroad or a Commission, is perfect, and that all tariffs should be changed from time to time to meet changed conditions in order to do justice to the railroads or shipper, as the case may be, and this the Commission has at all times been ready to do whenever satisfactory evidence should be offered to it showing the justice of and necessity for same.

The defendants assert that the temporary injunction should not be continued until the plaintiff has availed itself of its legal right to obtain redress of its alleged grievance, in so far as the freight rates are concerned, before the Commission, and alleges it is contrary to the principles of equity to entertain a suit where full and adequate remedy at law is open to the plaintiff; that it is contrary to the comity which Federal Courts extend to State tribunals to grant relief in said Federal Courts against State regulations promulgated under State laws, until the plaintiff has sought its constitutional right in the tribunals where the alleged unconstitutional regulation is attempted to be enforced.

The defendants allege that they are called upon to defend in this court the rates of their predecessors and maintained by themselves,

with a few changes as called for from time to time, without having had an opportunity to hear the complaint of the plaintiff and pass upon its justice.

Wherefore, the defendants pray that the injunction be discontinued or its operation suspended until the plaintiff applies for redress before the Commission and gives it an opportunity to pass upon the matters which are alleged in plaintiff's complaint."

The court held said paragraph to be insufficient and struck it out and (R. p. 62) subsequently on the hearing on the merits the same matter was renewed and again overruled by the court, and the first three assignments of error are predicated thereupon.

Judge Trieber's opinion on the motion to dissolve is found beginning on page 66 of the record.

A STATEMENT OF THE EVIDENCE.

It is difficult to give a concise statement of the evidence because the testimony is so voluminous and so many questions are discussed by so many witnesses from so many angles that a brief statement of it is practically impossible. A statement of the character and purport of the testimony on the various issues may be of some service to the court.

The defendants present many matters in defense of the suit, which will be discussed later and in different connections. Your attention will now be directed solely to the central controversy of the case, which was the division of the property between State and interstate traffic, and the apportionment of the expense between State and interstate and miscellaneous traffic.

Plaintiff's Evidence on the Revenue Theory.

The plaintiffs contended that the revenue from each of its three sources of income, freight, passenger and miscellaneous, should be separately ascertained (and this was done), then subdivide the freight revenue into intrastate and interstate, and subdivide the passenger revenue into intrastate and interstate (and all this was done). They contended that miscellaneous, principally mail and express expense, is incapable of division. Having the revenues thus separated, the proportion of each to the whole is used as a factor to divide expenses and property with this exception: The common expenses between freight and passenger are divided on the train mileage basis, the inaccuracy and injustice of which will be hereafter discussed. A proportion of expenses and property is set aside, representing the percentage of miscellaneous revenue to the whole property and expenses. When the results are thus obtained then the plaintiffs contend that there must be added to the intrastate expenses, passenger and freight, a given percentage representing the increased cost of intrastate passenger and freight traffic over interstate. Thus, Judge

VanDeventer found 15 per cent should be added as representing the extra cost of intrastate passenger, and 100 per cent as representing the cost of intrastate freight traffic. The result thus obtained is the revenue basis contended for by the plaintiff in these cases. The evidence to support that revenue theory was opinion evidence of three classes.

The witnesses for the railroads thus reason: (a) That the revenue from State and interstate traffic is ascertainable, and in this case for a given time was ascertained, and the expenses were ascertainable, and for a given time were ascertained; but, unlike the revenue, the expenses were not susceptible of division between intrastate and interstate. Therefore, to separate them, some arbitrary basis must of necessity be adopted, and that the basis most nearly correct, that which contains less fault than any other basis suggested should be adopted; and this they believe to be the revenue theory. They say that various bases have been suggested and found inadequate, the principal other one being the ton-mile and passenger-mile basis. Many reasons were given by the plaintiffs' witnesses why these bases were uncertain, unreliable and unfair; and the revenue basis was advocated as affording the best solution of the difficulty and was supported as reaching an approximately true result. It is passing strange that the revenue basis, which the plaintiffs' witnesses extol, is not used in the division between passenger and freight of common expenses. In lieu of it at that point is the train mileage basis. The large sums which this change of base burden the State will be hereafter shown.

(b) Many witnesses, chiefly operating officials of different railroads, testified that there was an extra cost incurred in earning a given amount of revenue in intrastate traffic over earning the given amount of revenue in interstate traffic. Various opinions as to the extent of this extra cost, both as to passenger and freight traffic, were given. They ranged from 25 per cent to 50 per cent on passenger traffic, and from 100 to 800 per cent on freight traffic. The principal reasons assigned were two: (1) That all intrastate traffic has two terminal expenses within the State, while the interstate traffic has but one, and much of it, the transtate traffic, has none; (2) that the local trains, both freight and passenger, were much more expensive to operate than through trains, and that the local trains, particularly local freight trains, were principally engaged in hauling intrastate traffic.

Extra Cost.

(c) Much opinion evidence was adduced to the effect that there was a relation between intrastate and interstate rates, both freight and passenger, and that the freight rates were largely based on the cost of the service and that there was a relation existing between State rates and interstate rates, which relation was based on classification;

Relation of Rates.

and there was a corresponding relation of one interstate rate to another intrastate rate on the same class or commodity.

THE STATE'S SIDE OF THESE CONTENTIONS.

State's Evidence on Revenue Theory.

(a) That the revenue derived from each class of traffic was not a proper factor with which to divide either property or expenses; that it was contrary to all accounting principles to use the gross income as a factor to ascertain expenses or the value of property; and, furthermore, that the revenue received from intrastate and interstate rates did not represent, in any way, the expense of either traffic; and that a division of the property on such lines would not afford any criterion of the property devoted to such respective uses. It was furthermore contended that as the revenue from intrastate traffic was so much more per ton per mile than interstate traffic that this theory assigned to the State a larger proportion of property and expenses than the facts justified, and the higher the State rate was made the more property and more expenses would be assigned to the State, which is an unreal and fictitious method of ascertaining the property devoted to intrastate traffic and the expenses incurred therein.

Extra Cost.

(b) The State's witnesses admit that there was some extra cost in intrastate freight traffic, but express opinions that it costs more to earn a given amount of revenue in interstate passenger traffic than to earn the same amount of revenue in the intrastate passenger traffic. The reason that intrastate freight traffic was more expensive than interstate traffic was because the intrastate traffic represented the short haul, while the interstate represented the long haul. More of the short haul freight was carried upon local trains than upon through trains, and local trains are the more expensive kind of trains; but it was contended that the greater revenue received for the short haul more than compensated for the greater expense incurred in it. The statistics filed by the railroads show that the intrastate revenue per ton per mile was 98 per cent more than the interstate revenue per ton per mile on the Iron Mountain, and 141 per cent more on the St. Louis Southwestern, and it was contended that this more than counterbalanced the increased cost of intrastate freight traffic. In regard to the terminal handling within the State; it was admitted that as a general proposition it is true that for intrastate freight there are two handlings in the State and for interstate one, and frequently as to much of the interstate, the transstate, none; that these conditions did not exist in Arkansas. Cotton, cottonseed, grain and lumber constitute much over a majority of the freight traffic of Arkansas, and all cotton traffic was interstate and every bale of cotton has three terminal handlings within the State. Practically all grain was interstate,

and it was a very large movement, and most of it, except the transstate grain, had three terminal handlings within the State. Lumber, the largest single commodity moving on the roads in Arkansas, being about 35 per cent of the tonnage of the Iron Mountain road, was mostly handled three times within the State, and it was largely interstate traffic. Much of the transstate freight, like grain and the large movement to Texas, had handling at every division point in Arkansas, which were about 100 miles apart, and there would usually be two or three divisional handlings within the State, the cost of which would be almost, if not quite, as much as a terminal handling. Memphis, Tennessee, is the eastern terminus of the Iron Mountain road, and it has about one mile and a half track therein in addition to trackage rights over the bridge. All the expenses of the road in Tennessee were charged as if Memphis was situated in Arkansas, on the theory that these terminals served Arkansas.

On the opposite side of the State, on the Oklahoma line, is the city of Fort Smith, a jobbing and manufacturing point of 25,000 population.

The tracks of the Iron Mountain road follow a bend of the Arkansas River in entering the city of Fort Smith, and thereby go through a few miles of Oklahoma. This makes all the Fort Smith traffic, as well as all the Memphis traffic, interstate, and all of it has at least two terminal handlings in Arkansas so far as expenses go, and all transstate traffic passing through either of these gateways have one handling in the State in addition to the divisional handlings every 100 miles. Therefore, it was contended that the general proposition as to two terminals for intrastate, as against one or none for interstate, did not apply to this State. As to the local train, it was shown from statistics furnished by the Iron Mountain Railroad Company for October, 1907, and on the St. Louis Southwestern for October, 1908, which were put in evidence by the railroads as fairly representing the business of those roads as between intrastate and interstate traffic, that the load of the local train was largely made up of short hauls of interstate freight. On the Iron Mountain the load of the local trains was 71 per cent interstate as against 29 per cent intrastate, and on the St. Louis Southwestern it was 68 per cent interstate, as against 32 per cent intrastate. Therefore, it was contended that the expense of the local train should be apportioned in proportion to the respective load it carried, interstate and intrastate, and that the opinions of the witnesses on behalf of the plaintiffs who have testified that the great expense on intrastate freight traffic was due to the fact that the local trains principally handled intrastate freight, was based on conditions not existing in Arkansas, and therefore was unreliable and should be given no weight in the face of existing conditions.

(c) The evidence on behalf of the State as to the rates being

based on the cost of the service and the relation between the State and interstate rates may be classified as of two kinds: (1) *Opinion and* (2) *Demonstrative Evidence.*

Relation of Rates.

(1) The plaintiffs and the State each introduced much testimony of rate experts as to the effect given to cost of the service in the making of rates, particularly in the making of interstate rates, and the relation of one rate to another. Unquestionably the great preponderance of this evidence tended to show that the rates on interstate traffic prevailing in Arkansas were not based on cost of service, but were based largely, if not entirely, upon competitive and commercial conditions, and that the revenues received from the rates so made did not represent the cost of the service. Much of this was obtained by admission of plaintiffs' witnesses and much more by the State's witnesses. It was shown that the principal commodities in Arkansas were moved on interstate rates made on other considerations than the cost of service. As to the relation of State and interstate rates, much evidence was given that there was absolutely no such thing, if a cost of service relation was considered; that the only relation that existed between interstate and intrastate rates was a trade, or commercial relation, which more or less obtained in all systems of rates to preserve a parity or equipoise between one trade center and another. This was a relation based on commercial and competitive conditions, and not based on any relation of one rate to another, so far as the cost of hauling any given commodity was concerned. It was also in testimony from numerous witnesses that the classification made by classification committees did not preserve a relation between rates, as each State and each interstate tariff usually contained many exceptions to the Western Classification, and the great volume of commodity rates carried the given commodity out of the classification; and, hence, it was impossible for the classification to have preserved any relation between rates. Furthermore, it was shown that the classification did not preserve any parity of the class rates, and was in itself inconsistent and in many instances absurd. The Arkansas Commission Tariff under which the intrastate revenue was produced was a graduated distance tariff. It was claimed by the witnesses for the railroad to be not scientific and out of harmony with itself and did not preserve the ratio between rates which should be preserved.

(2) The State went deeper into this question than the production of rate experts, and put in evidence the system of rates upon all of the great commodities moved through, into and out of the State, thereby showing the rates upon which the great bulk of the interstate revenue was earned. Many of these leading rates, like lumber, cotton, cottonseed and its products, grain, coal and others were shown to be zone rates. For instance, there was a lumber rate from a zone composing all the territory south of the Arkansas River extending to the Gulf of Mexico, to St. Louis, for 18 cents a hundred pounds; a car of

lumber shipped from Little Rock to St. Louis would move on an 18-cent rate with a similar car from Lake Charles, Louisiana, 400 miles south of it, on the same rate. Grain moving into Arkansas, and through Arkansas to the seaport, was shown to move under tariffs which had zones extending from points several hundred miles apart, upon which the same rates were charged to Arkansas and points beyond. Cotton moved in zones both at the beginning and end of the movement. Some of the zones were 100 miles apart in Arkansas and Louisiana and several hundred miles apart in the east, thus the element of distance being disregarded at each end of the haul. There are zones in class rates, which are more stable than any other rates, and such rates represent large traffic. For instance, there is a zone rate on classes from Pittsburg, Pa., territory to Texas common points, the tonnage passing through Arkansas on each of the plaintiffs' roads. This Pittsburg territory extends as far north as Toronto, Canada, and the Texas common points are 2,600 in number and 600 miles apart. For instance, a shipment from Toronto to the farthest Texas common point would be hauled at least 1,000 miles further than a shipment from Pittsburg to the nearest Texas point, and yet the revenue is the same, and that revenue divided according to its mileage in Arkansas with the whole mileage of the haul on the road, and then used as a factor to divide the expenses.

Many of these rates are illustrated by maps attached as exhibits 38 to 43.

In addition to showing that the great commodities of the State moved upon interstate rates which did not represent the cost of the service, the State went deeper still and showed that even these rates were again unequal through the divisions with other roads. The division sheets with other roads affect the revenue received on the same haul. For instance, the shipments of lumber from Little Rock and Lake Charles, Louisiana, to St. Louis. For each the shipper would pay 18 cents per hundred, although one was hauled 400 miles further than the other, but the difference in revenue was even more marked when a shipment was received from another road. Say that the car hauled from Lake Charles was carried to Alexandria, Louisiana, over another road, which would be given, say, 6 cents of the 18-cent rate; then the Iron Mountain would take it from Alexandria to St. Louis for 12 cents and at Little Rock, after hauling it two or three hundred miles, would pick up a similar car and haul it into St. Louis and get 18 cents for it, and the revenue from these two cars are used as proper factors to divide the expense between State and interstate traffic.

Again, lumber received at a point where there are tap lines and a similar shipment from the same place by an individual bear different revenue for identically the same service, the tap line getting from two to seven cents, according to its favor, out of the 18-cent rate, while the car received at the same place from a sawmill with no tap

line attachment would produce 18 cents revenue for the haul. On the other hand, with a few exceptions, all of the intrastate traffic was moved upon a graduated scale, which represented, more or less accurately, an increasing rate for increasing distances. In regard to the classification, it was shown that the Western Classification, which governed part of the traffic moving into Arkansas, was full of exceptions made by every State which promulgated rates, and exceptions were found in every interstate tariff that was issued, and the great mass of commodity rates, upon which the greater volume of traffic moved, were not affected by the classification at all, which only applied to the ten rates known as the Class Rates. Furthermore, it was shown that the classifications were largely affected by commercial and competitive conditions, and in many instances were absurd, and not reflective of any relation of one class with another. The purport of the great mass of testimony along these lines was to prove that there was absolutely no relation between State and interstate rates based upon the cost of service, or based upon anything else, and that there was no relation between rates themselves in different tariffs or any definite or fixed relation of one rate to another, and that revenue produced from these rates was not reflective, in any degree whatsoever, of either the cost of the service or the relation of State traffic to interstate traffic, or the expense of either, nor did it remotely touch the use of the property devoted to either class of traffic.

THE STATE'S PLAN OF SEPARATING EXPENSES.

In addition to endeavoring to meet the plaintiffs' case on each proposition, the State undertook to prove that the expenses of the intrastate and interstate traffic could be apportioned, with a fair degree of accuracy, between intrastate and interstate traffic by using factors common in railroad accounting, and the result would be a fair approximation of the actual expense incurred in each class of traffic. In order to limit the controversial ground, the State accepted without approval, the plaintiffs' use of the train mileage basis for division of maintenance-of-way and other common expenses between freight and passenger; and likewise accepted, without approval, the plaintiffs' use of the revenue basis for division of property and taxes, and also its use to divide some minor expense accounts difficult of allocation.

The fundamental claim of the plaintiffs is the extra cost of intrastate over interstate traffic, and it was to ascertain all elements of extra cost and allocate them that caused the State to attempt a plan of separating expenses between State and interstate traffic. The State endeavored, in order to accomplish this, to put the maximum allowance in each instance in favor of the interstate as against the intrastate traffic, so that when the maximum allowances were made upon every

item of extra expense which was ascribed by the witnesses for the railroads as attaching to intrastate traffic, it could be ascertained accurately whether the extra revenue per ton per mile of State over interstate compensated for the maximum allowance of extra cost in intrastate freight traffic. In dividing interstate and intrastate passenger traffic, the same plan was adopted. When the State worked out its division of expense for two purposes; one, to demonstrate that it was unnecessary to resort to an arbitrary basis to divide these expenses when a practical basis, closely approximating actual results could be obtained; and, secondly, to show that after making maximum allowances against the intrastate, still the extra cost of the said business was less than the extra revenue derived from it; almost, if not every, witness introduced by the State who testified as to the allowances made by the State, was positive that too much had been allowed in favor of the interstate over intrastate traffic. In making this apportionment factors in common use by the railroads were principally employed; the car mile; the train mile; the engine mile and the ton mile were the principal bases used, each in its proper place. Only one factor was used which was not common in railroad use, and that should be common in railroad accounting because it is common in all other large business enterprises, and that is the proper manner of distributing general or overhead expenses. These were, pursuant to a sound and generally accepted accounting principle, distributed over each class of expense in proportion that each bore to the whole. Thus, the president's salary would be distributed over Maintenance of Way, Maintenance of Equipment, Transportation, Traffic, etc., in the proportion that each of those classes of expenses bore to the whole. This principle is so common, and so thoroughly sound, that it finds use in every line of business except railroad business, and it is as applicable there as it is elsewhere. With this exception, in the distribution of expenses, there is no adoption of any factor other than those in every day use in railroad accounting and railroad operation. In order to make this division of expenses, it was necessary to locate the items of extra expense of the intrastate over the interstate. As heretofore stated, the principal items were the extra terminal handlings, and the fact that most of the intrastate traffic was carried in local trains. During the Missouri Rate litigation, there was prepared for use in that case, and also in this case, complete statistics of operation on the St. Louis Southwestern Railway for the month of October, 1908. Its officers testified that the test was fairly made; that the statistics were fairly gathered and were carefully compiled, and the result of the operations of that month would be fairly representative of the business of that road for several years, and would be fairly representative of the intrastate and interstate traffic at any time, as interstate and intrastate traffic moved hand in hand during the year, and any one month would fairly represent the relations of one class of

the traffic to the other for a series of years. It was further testified that it was a normal month of a normal year. The expenses of this month were worked out in great detail, and the State's accountants accepted them without addition or change, and used them as a basis for dividing the expense on that road. The Iron Mountain officials, in anticipation of a request from the State in this case for similar statistics, prepared and gave to the State the result, generally, of operations for the month of October, 1907, and they testified that that month fairly represented the intrastate and interstate traffic on that road. The Iron Mountain had not made a statement of the expenses of local and through trains, as had the St. Louis Southwestern, and it became necessary for the State to do so, and prepare the statistics in detail for this month, as had been done by the other road for the month of October, 1908. The State's accountants did much work in supplementing the statistics of the Iron Mountain for October, 1907. The result of the statistics of those two months were such that they were able to separate the expenses of the local and through freight trains.

Freight Division.

The work of separation of expenses between intrastate and interstate freight traffic must begin with separating the expenses of the local and through trains. When this is obtained for a given period, then it was possible to work out, with a fair degree of accuracy, the actual expenses between the two classes of traffic for said period. To illustrate: Maintenance of way, the first item of expense, was divided on a basis of car miles and engine miles for each local and through train run during the said month. Engine mileage was reduced to car mileage on a basis of two and a half times for an engine mile for one freight car mile, which was the maximum amount which the testimony indicated was the injury to the way by the engine over the car. In Maintenance of Equipment, the locomotives were divided between yard locomotives and road locomotives. Maximum allowance was made for yard switching for yard locomotives to provide for the extra maintenance resulting from the character of the service, as compared with the service rendered by the road locomotive in pulling trains between stations, and maximum allowance was also made against local locomotives on account of extra switching done by each at stations where no yard locomotive was maintained. In apportioning the expenses between freight cars, a maximum allowance was made for the injuries resulting from stopping and starting and terminal handling which were incident to local trains over through trains; and thus on through the various items making up these expenses an allowance was made wherever the evidence showed it should be.

Owing to the method in which the books of the company were kept, it was impossible to definitely locate Traffic Expenses between State and interstate, and the basis adopted by the railroads, the

revenue basis, was used for this item, although it unduly burdened the State. The station expenses were divided between train service and those which were not train service, and those which were not train service were divided between intrastate and interstate on the basis of the number of tons of each class of traffic handled. The State assumed that each intrastate ton was handled twice and each interstate once. Yard expenses which were incurred in assembling and distributing cars were apportioned on the basis of the number of cars hauled in and out of the terminals. These expenses are usually identical, irrespective of the class of service. Wherever it was not identical allowance was made for it. For instance, with the St. Louis Southwestern, Little Rock is the terminal exclusively for local trains, it was so treated. Fuel and locomotive expense were capable of actual ascertainment, and the actual figures were used. Wages of train crews were capable of actual ascertainment, and actual wages of the crews on the local and through trains were definitely located and properly charged to each. Other train expenses which were incurred by the train, such as stock killed on the right-of-way, watching crossings, signaling, etc., were divided between local trains and through trains on the train mile basis. Losses and damages were actually ascertained between intrastate and interstate, and divided directly according to actual expenditure. After the train cost was actually ascertained and the proper allowances made for the cost of each train, that is, local and through, and the local train charged with all of the extra cost which could be definitely located, and it is believed that all of it, and more, was located, then the expense of each is divided in the proportion of the traffic each carried, intrastate and interstate. In other words, the expense of the local train is ascertained. It is found to contain, for illustration, 70 per cent interstate and 30 per cent intrastate, and the expense of that train was divided in that proportion. The through train, is found to contain 95 per cent interstate and 5 per cent intrastate, and its expense was divided in that proportion; on the basis of the ton mile carried by each train of each class of traffic.

Passenger Division.

On the passenger division of expenses the same principles were applied, and with these differences in the facts: On the St. Louis Southwestern road it was testified by its officers, and shown by time-cards by them put in evidence, that that road carried no through passenger train in Arkansas. All of the trains in the State were local. On the St. Louis, Iron Mountain & Southern Railroad, as shown by the testimony of its officials in exhibit 46 in this case, there were eight through trains, one of which was a fast mail and carried practically no passengers, and 48 local trains. It was undisputed that the seven through trains largely carried interstate passengers, and carried some intrastate passengers, and the 48 local trains were made up indiscriminately of intrastate and interstate passengers. It was further

shown that the records of the auditor's office would not show whether a passenger during any given period in the past had ridden in a local train or in one of the seven or eight through trains, therefore it was impossible on that road to make a separation of the local and through trains, and as there was no such division of trains on the St. Louis Southwestern road, it was of course impossible to separate the passenger traffic between the local and the through trains. Therefore, the separation in the passenger side of the case is between the classes of cars; that is, passenger cars, Pullman cars, baggage, mail and express. This is definitely worked out on the same principles which have been used in working out the freight problems. The result of this plan of working out the expense was to show that on the St. Louis Southwestern, applying the earnings to its property used in that traffic, according to its own division of property, that there was a return on the intrastate freight of 13.99 per cent; on the intrastate passenger of 5.79 per cent, or a total on intrastate freight and passenger of 9.16 per cent on property invested in intrastate freight and passenger business, and a total return on all property, including intrastate, interstate and miscellaneous, of 12.83 per cent. (Exhibit V.) On the St. Louis, Iron Mountain & Southern (Exhibit Q) is shown intrastate freight, 10.33 per cent; intrastate passenger, 5.31 per cent; total intrastate freight and passenger, 7.69 per cent return upon the property invested in intrastate freight and passenger business. This shows a total return of 7½ per cent on all property on all business, including intrastate, interstate and miscellaneous.

In these calculations the State did not attempt any other basis for dividing the property than that used by the plaintiffs, the revenue basis. Hereinafter we seek to show that the revenue basis unjustly burdens the State in using it as a factor with which to divide the property, but the exhibits merely use the plaintiffs' apportionment of the property to State purposes to show that upon it a compensatory return is being earned. The same is true of the use of the train mile as the factor with which to divide common expenses between passenger and freight traffic. The railroads so divided them and the State used the sums so divided to work out the problem it was attempting to solve.

THE PLAINTIFFS' CASE IN REBUTTAL.

Plaintiffs contested some of the details of the accountants' work on the October, 1907, statistics, contending that the subtraction of the local train expense from the total train expense was unreliable in that one was made up from the books of the company and the other was from the wheel reports. The difference would be what is termed the lapovers. The plaintiffs contend that the lapovers from September into October would not, necessarily, offset the lapovers from October into November, while the defendants contended that

one would offset the other, and that the difference was a neglible quantity. The plaintiffs contend that the statistics of one month was not a fair test of the six months period, and particularly that October was not. In this the plaintiffs' witnesses in rebuttal were in direct conflict with the plaintiffs' witnesses in chief, who had testified that one month was a fair test of the relative business between State and interstate, and they had also testified that the two different months of which statistics had been put in by the railroads were fairly representative months. There is much testimony on this point, principally of the plaintiffs' in rebuttal against the plaintiffs' in chief. It was also contended by the railroads that there was a congestion in October, 1907, rendering statistics of that month unreliable, and thus it was also in conflict with its previous testimony on this subject; all of this will be pointed out in detail when this matter is considered in another connection. Meeting the issues presented by the plaintiffs' plan of separating the State and interstate business, broadly, the plaintiffs took the position that no solution of the problem had been worked out by the State in the plan presented by it. This was chiefly testimony of operating officials of different railroads who contended that the bases adopted by the State were unreliable when used for the purposes used by the State, and that the results attained through the use of these bases afforded no approximation of the true result sought to be obtained. Then the detail of the State's plan was attacked. Almost every basis used was criticised. The various allowances which were called arbitraries, representing the extra expense of the local trains, were criticised, and their sufficiency, in many instances, denied. More often the attack was made upon the ground that there was not sufficient data upon which to base the allowances for such extra items of expense. In the criticism of the State's bases for separating expenses, the critical opinions of the railroad officials were carried back to the railroads' own bases used in separating passenger and freight expenses, and in separating the expenses of Arkansas from other parts of the Iron Mountain system where the expenses were pooled. This attack was made upon the train mile basis, which is the basis used by the railroads in their original case when separating the expenses of the passenger and freight traffic as the beginning point in which to separate their expenses on the revenue basis in order to apply the respective revenues to each class, and also upon the car mile basis for separating expenses of maintenance-of-equipment between Arkansas and other States forming the Missouri Pacific system.

Repairs of cars, one of the largest items of expense, of all the cars in the Missouri Pacific system, including the Iron Mountain, were pooled; and a proportion assigned to Arkansas by taking the car miles of the cars in Arkansas as representing the proportion of the total expense incurred in Arkansas. The State's accountants accepted the amount thus assigned to Arkansas, and subdi-

vided it between the local and through trains on the freight side of the problems on the car mile basis, and on the passenger side of the problem divided it between coach, baggage and mail cars on the car mile basis. Consequently, we have the anomalous position of the rear guard attacking the advance. If the attack of the plaintiffs in rebuttal against the State's use of the car mile and train mile for the purposes above indicated is sound, necessarily the attack reaches back and destroys the whole computation made by the railroads on the revenue basis, as these factors were used before the revenue basis was applied, and the revenue basis when applied was bottomed on a division of expenses by the car mile and train mile. The plaintiffs also contended in their testimony in rebuttal that several of the bases used by the State were improperly used for that particular purpose, and that other bases should be used in lieu thereof; for instance, the distribution of expenses for maintenance-of-way was made over the whole system according to the overhead plan adopted by the State accountants for distributing general expenses. In this way they treated the maintenance-of-way expense as a general expense. The accountants on both sides made an error in regard to the expenses of passengers carried in Pullmans. The railroad accountants, in attempting to correct an error made by the State's accountants, fell into an error themselves on this subject. Both errors were carefully and conscientiously corrected by the accountants on each side. This called for a revision of the statistics on each side, but the error thus made affects the return on the property only a fraction of one per cent, and is hardly worth considering, but it called for a reapportionment of the expense on the passenger side between the passenger coaches, the Pullman coaches, the baggage, mail and express cars, and including the cafe and observation cars and the baggage cars used by the Pullman passengers, rendering the detail of the distribution somewhat more complicated, while not changing the principle, or the result materially, but, in fact, emphasizing the correctness of the principle employed, as it enabled the accountants on each side to agree as to how each of the errors could be corrected in redistribution of the expenses on broader lines and in more detail. Much of the testimony in rebuttal and surrebuttal was devoted to operating questions. The State's accountants had used a table prepared by Wellington in his work on "Railway Location," in which he had worked out the causes for injuries to freight cars, giving the percentage for each cause. The plaintiffs, in rebuttal, admitted the authority of Wellington's work at the time it was first written, but contended that the table prepared, while continued in later editions, had been prepared for the first edition which was issued at the time that freight cars were equipped with handbrakes and link and pin couplers, and that under modern equipment the percentages should be much higher. On the other hand, the State, in surrebuttal, introduced much expert testimony to show that

the change in equipment would have the opposite tendency, and that the percentages given by Wellington were much too high under modern equipment. It was also contended by the witnesses for the plaintiffs in rebuttal that the allowance for switching made by the local trains was insufficient, and that there was no data upon which such allowances could be accurately based. In surrebuttal of this the State produced numerous trainmen, familiar with operation, who testified that the allowances gave the locals too much, and were too high, and that the basis for the extra mileage incurred was readily ascertainable. It was also contended that the allowance made for the locomotives, as causing two and one-half times more injury to the way than freight cars, was insufficient, and that the basis was unreliable; while the State, in surrebuttal, produced experts who testified that the allowances made in the original exhibits were too high. Various other matters of similar character were gone into in rebuttal and surrebuttal. The result of the plaintiffs' case in rebuttal was summarized in the Iron Mountain exhibit No. 56, which exhibit follows, along general lines, the State's plan of separating the expenses between intrastate and interstate, but changed the bases in many instances, and changed the allowances made by the State to conform to the testimony introduced by the plaintiffs, and produced a return upon the property very much less than that produced in the State's exhibit. In the trial in the lower court this exhibit was termed a caricature of the State's plan of dividing expenses, and when the evidence is considered, it is believed that this is an apt characterization of it, unless a "distortion" of the State's plan would be found to be a more appropriate term.

THE DEFENDANTS' CASE IN SURREBUTTAL.

The general nature of the testimony of the State in surrebuttal has already been given in stating the nature of the plaintiffs' case in rebuttal, and it would be a repetition to summarize it further. Generally speaking, it may be said that the State's case in surrebuttal showed this: That the original exhibits filed by the State were made upon maximum allowances against the intrastate traffic, and each allowance was justified as an extreme one against the intrastate traffic; and tended to justify the basis used in each case. In fact, the physical side of the case was much more thoroughly gone into in surrebuttal than in the case in chief. As heretofore explained, the State's plan of dividing expenses was worked out for the purpose of showing that the expense could be divided on fair bases, and, therefore resort to an arbitrary method was not necessary; and, secondly, to demonstrate that the extra cost of intrastate over interstate traffic could be properly located and accounted for, instead of being left to opinion evidence, which varied so greatly as to be a strong indication of itself of its own unreliability. When the plaintiffs in rebuttal of this

attacked the soundness of the bases and the correctness of the allowances made, and the plan adopted in working out the various allowances, the State then developed full justification for all that had been done in the original case, and showed by a decided preponderance of the testimony that the allowances made in the original exhibits were excessive in favor of the interstate traffic, and that on an accounting between the two they should be materially reduced in order to arrive at a fairly accurate division of the expenses between these classes of traffic. This testimony will be gone into more in detail in another connection.

OPINION OF THE TRIAL COURT ON THE BASES ADOPTED.

The court said:

> "The straight revenue theory, as advanced by the learned counsel and accountants of the railroads, is clearly wrong, as none of them takes into consideration the increased rates charged for the intrastate traffic. No further proof of the fallacy of this theory is required than the examples and calculations of the accountants for the railroad in the exhibits filed with their testimony."

The Court quotes Mr. Nay's statement, which was similar to Mr. Kimball's hereafter set out (187 Fed. 321-322). The Court says:

> "But to ascertain the cost of the different items of expense it is impossible to adopt either theory to the exclusion of the others in all matters. For some items the revenue theory will necessarily have to be adopted, while in others the ton mileage, car mileage or train mileage are the only bases which will enable the Court to determine from the evidence in these cases how the different items of expenditures should be apportioned. (187 Fed. 324.)
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> "On the other hand, the accountants for the State offered in evidence schedules which they claim are based on facts as they appeared from the records of the railroads when such were obtainable, and on the experience of men long in the railroad service when factors had to be adopted arbitrarily. The scheme for obtaining these facts is new, never having been used by any accountants in any of the numerous rate suits which have heretofore been before the courts. It was devised by Mr. Wharton, a member of the firm of Haskins & Sells, expert accountants of national reputation (p. 331).
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> * * * * * * * * *
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> "But, in the opinion of the Court, the scheme itself furnishes the best method of solving this problem that has been called to the attention of the Court, depending, of course, upon the cor-

rectness of the numerous factors necessary to obtain accurate results (p. 332). To determine these important issues under consideration, the Court intends to adopt their schemes and ascertain in that manner, in connection with all the other testimony in these cases, the difference of the cost of the intrastate as compared with the through business, and it is of the opinion that in this way it will reach conclusions as nearly accurate as from the evidence is possible."

Hereafter we think we will be able to demonstrate that the Court made palpable errors which caused him to reach the conclusion he did, but he was evidently following the right path, in part at least, in the plan adopted by him to reach the conclusions. This subject is mentioned here only to complete the statement of the case under the rules, in order that the assignments of error which follows may be the better understood.

ASSIGNMENT OF ERRORS.

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, constituting the Railroad Commission of the State of Arkansas, defendants in the above entitled cause, and aver that in the record and proceedings herein that there has been manifest errors committed in this, towit:

1st. The Court erred in not sustaining the motion to dissolve the temporary injunction herein, which motion was filed and considered by the Court prior to taking the testimony herein, on the ground therein set forth that the complainant had filed this bill in equity in the United States Circuit Court, asking relief against freight rates promulgated by the predecessors of the present Railroad Commissioners, without first praying relief from the Commission, which was authorized and required by law to grant relief against unreasonable, unremunerative or confiscatory freight rates.

2d. The Court erred in not dismissing the bill of plaintiff on final hearing because the evidence showed that the freight rates embraced in Standard Distance Freight Tariff No. 3, sought to be enjoined herein, had been in force with only minor changes made from time to time and those not materially affecting the revenue of the plaintiff, for a period of six years prior to the filing of the suit herein, and the complainant did not before filing this suit apply to the Railroad Commission for relief against any of said freight rates as unjust, unreasonable, unremunerative or confiscatory; when the evidence showed that the scheme of freight rates embraced in said tariff were originally put in force in the year 1900, subsequently re-enacted in 1903, and when put in force the Railroad Commission stated and declared to the plaintiff and other carriers affected thereby that if on fair test of said rates, in whole or in part, they proved to be unjust, unreasonable, unremunerative or confiscatory, that relief would be granted by the Commission upon proper showing of such facts.

3d. The Court erred in not dismissing the bill on final hearing because the evidence shows that since 1900 the general scheme of freight rates sought to be enjoined herein has been in force under order of the Railroad Commission and the whole body of freight rates sought to be enjoined, save and except minor changes made from time to time which did not materially affect the revenue of the plaintiff, had been in force since 1903 and the plaintiff and other carriers had acquiesced for said period of time in said scheme of freight rates, which were embraced in Standard Distance Freight Tariff No. 3, complained of in the bill herein.

4th. The Court erred in finding, as stated in the opinion of the Court, that the evidence showed an increased cost of operation for ten years prior to the filing of this suit, and that rates that had been remunerative ten years prior to its filing would no longer be so on account of increased cost of operation, and on such account that there was no acquiescence in the plaintiff in submitting to the schedule of freight rates; when the evidence shows that the increased efficiency of locomotives, cars and tracks and other similar causes had rendered the cost of carrying freight less than at the beginning of the ten years' period referred to by the Court and less than at any prior period.

5th. The Court erred in holding that the reduction by the Legislature of passenger rates from three cents to two cents per mile was an excuse for the complainant to seek relief in the Federal Court prior to applying to the Railroad Commission for relief therein against the freight rates, because under the law the Railroad Commission is authorized, upon proper showing, to increase the freight rates so as to compensate the plaintiff for its loss in passenger rates, if any loss occurred on account of said legislative reduction of the passenger rates.

6th. The Court erred in its decree in adjudging and decreeing that the freight rates in Standard Distance Tariff No. 3 and passenger rates fixed by the General Assembly of 1907 were confiscatory and would not afford complainant fair and reasonable return upon its property, and erred in decreeing that a compliance with said freight and passenger rates would be taking the property of the complainant without due process of law, because the evidence shows that said freight and passenger rates are reasonable and compensatory and that they do afford the complainant a fair and reasonable return upon the value of its property invested in intrastate traffic.

7th. The Court erred in making perpetual the temporary injunctions heretofore granted in this cause and enjoining these defendants from enforcing Standard Distance Freight Tariff No. 3, or any rate or schedule therein, and from enforcing the Passenger Rate Act of 1907, and particularly erred in enjoining any rates in said Standard Freight Distance Tariff No. 3, as many, if not all, of said rates are reasonable, just and compensatory.

8th. The Court erred in not dismissing plaintiff's bill because plaintiff failed to establish by clear and decisive evidence that the intrastate freight and passenger rates sought to be enjoined were confiscatory and in holding upon the evidence offered by the plaintiff that said rates were confiscatory when said evidence was based wholly on opinion testimony without sufficient data upon which an intelligent opinion could be based and said evidence was not of that decisive and clear character which is required to satisfy a court that rates promulgated by a State were confiscatory.

9th. The Court erred in not dismissing the plaintiff's bill because the plaintiff had not overcome the presumption that the rates established by the State were reasonable and compensatory by a preponderance of the testimony.

10th. The Court erred in not dismissing the bill of plaintiff because the preponderance of the testimony established the fact that the freight and passenger rates sought to be enjoined were compensatory and earning the complainant a fair return on its property.

11th. The Court erred in sustaining the plaintiff's bill upon the evidence offered by the plaintiff, when it was shown in the evidence that better testimony than that offered was obtainable by the plaintiff in the form of detailed statements of revenue derived from local and through freight trains, and detailed statements of the expenses of local and through freight trains and the amount of State and interstate traffic carried respectively on the local and through freight trains; that the plaintiff instead of resorting to the best evidence to ascertain the relative cost of State and interstate traffic produced only opinion testimony, which was of insufficient probative force to overcome the presumption of the validity of the rates established by the State when better and more reliable testimony could have been produced by the plaintiff and was in its possession and control.

12th. The Court erred in holding the passenger rates to be confiscatory when the evidence shows that the complainant voluntarily made passenger rates equal and less than those fixed by the State and the plaintiff carried a large volume of passenger traffic on rates voluntarily made by it and other carriers on rates as low as, and in many cases, lower than, those fixed by the State herein complained of.

13th. The Court erred in holding the freight rates to be confiscatory when the evidence shows that the complainant voluntarily made freight rates equal and less than those fixed by the State, and the plaintiff carried a large volume of freight traffic on rates voluntarily made by it and other carriers on rates as low as, and in many instances, lower than, those fixed by the State herein complained of.

14th. The Court erred in finding that the period of six months ended December 31, 1907, fairly represented the earnings and expenses of the plaintiff, and further erred in not holding that the revenue and expense of October, 1907, fairly represents one-sixth of said period.

15th. The Court erred in not charging the plaintiff with a fair annual rental for the use of the Bunch elevator, when the evidence shows that said property had a fair rental value of $20,000 per year and the plaintiff only charged $1.00 to its tenant per year rental therefor.

16th. The Court erred in holding that the division of expense apportioned to Arkansas by the plaintiff for the repairs of tools and machinery was fair.

17th. The Court erred in not deducting from operating expenses the fine of $10,000.00 and costs imposed on the plaintiff for illegally giving free passes to members of the Legislature.

18th. The Court erred in charging the expense of the Memphis terminals and the portion of plaintiff's road in Tennessee to the expenses incurred in Arkansas.

19th. The Court erred in charging all the expense of the Fort Smith terminals to the Arkansas expenses.

20th. The Court erred, in sustaining as proper, salaries paid by the plaintiff to lobbyists, and salaries and fees paid attorneys outside of Arkansas.

21st. The Court erred in charging any part of the expense incurred for the leased line known as the Paragould trackage to intrastate traffic when the evidence shows such expense to be incurred wholly for interstate traffic.

22d. The Court erred in charging the rental of the Van Buren bridge to the Arkansas expense, particularly any part thereof to the intrastate expense.

23d. The Court erred in holding the plaintiff road was efficiently operated.

24th. The Court erred in apportioning the property of the plaintiff in the State between the intrastate and interstate traffic on the revenue basis in order to ascertain the proportion of said property used in intrastate business.

25th. The Court erred in the bases adopted for apportioning expense between intrastate and interstate traffic.

26th. The Court erred in apportioning the miscellaneous expenses on the revenue basis.

27th. The Court erred in declaring in the opinion that the State contended for a division of property and expenses on the "ton mile basis."

28th. The Court erred in finding that the intrastate freight rates were only 50 per cent higher than the interstate rates, when the undisputed evidence showed that the revenue per ton mile under Standard Distance Freight Tariff No. 3 produced 98 per cent more revenue per ton per mile on the Iron Mountain Railway Company than the interstate traffic produced per ton per mile and on the St. Louis Southwestern Railway Company, 141 per cent more per ton per mile.

29th. The Court erred in using the revenue basis for dividing any expenses and particularly without allowing for the excess of at least 50 per cent which the Court found the State revenue was higher than the interstate revenue; the evidence shows that by using the revenue as a factor without making allowances for the difference between the two that the State expenses are burdened unduly in proportion to the excess of the State revenue over the interstate revenue.

30th. The Court erred in not adopting as a whole the plan of division of expense presented by the State, which said basis of division was sustained by preponderance of the testimony as being the best basis for fairly apportioning the expense between intrastate and interstate traffic.

31st. The Court erred in not accepting the results of the statistics obtained from the test months which were put in evidence by the complainant. The evidence shows that October, 1907, was a fairly representative month of the six months' period introduced in evidence by the Iron Mountain Railway Company; that October, 1908, was a fairly representative month between State and interstate traffic on the St. Louis Southwestern and further the evidence shows that the plaintiff was estopped from questioning that said months are fairly representative for the purposes used by the State.

32d. The Court erred in charging to interstate business only 40 per cent of the expense of the local trains when the evidence shows that on the Iron Mountain it should be about 72 per cent and on the St. Louis Southwestern about 68 per cent of the expense of the local trains is chargeable to interstate freight business and said finding of 40 per cent was not supported by the evidence.

33d. The Court erred in dividing maintenance of way expenses on the revenue basis and particularly in not making allowances for the difference between the intrastate and interstate revenue when using the revenue as a factor in dividing said expense.

34th. The Court erred in its division of expense between local and through trains in charging 50 per cent extra to yard locomotives as against the local train and 75 per cent additional for local locomotive mileage when the evidence shows much lower percentage should be used to equalize them.

35th. The Court erred in the division of the expense of the maintenance of equipment of freight cars in charging 25 per cent extra to the local trains for starting and stopping and 13½ per cent for terminals handling when the evidence shows that much lower percentage should be charged for said causes. The Court also erred in this item in estimating that the through trains stop every 35 miles as against five miles to the local trains. The Court also erred in this item in not charging transstate and interstate traffic with the cost of starting and stopping freight cars and in making different allowance for interstate and intrastate traffic, when the evidence

shows that this is an element of expense from the physical starting and stopping of freight cars unconnected with the class of traffic carried in said cars.

36th. The Court erred in not apportioning general expenses according to the plan adopted by the State:—The Court particularly erred in charging all of these expenses on the basis of the supervision in maintenance of equipment and transportation only, whereas, the evidence shows a proper share of such expenses should be charged to the maintenance of way and all of the other expenses.

37th. The Court erred in dividing the item of hire of equipment on the revenue basis and erred in charging an additional 30 per cent to local traffic when the evidence shows there is no relation between the revenue and said item of expense, and there is no evidence to show that 30 per cent or any other percentage should be added to local traffic for this item of expense.

38th. The Court erred in the basis adopted for apportioning station expenses.

39th. The Court erred in finding various omissions from the expenses apportioned to the State in the State's plan of dividing expenses between intrastate and interstate traffic and particularly erred in finding that the dead weight on local trains exceeded the dead weight on through trains 14 per cent, and particularly in finding that for all such alleged omission that 8½ per cent should be charged to the local trains, when the evidence fails to show any basis for such alleged omissions or such percentages as found by the Court.

40th. The Court erred in the basis adopted for apportioning fuel and locomotive expenses and in the basis adopted for "other train expenses."

41st. The Court erred in charging the State passenger traffic with 10 per cent greater than the interstate passenger traffic, when the preponderance of the testimony shows interstate traffic is the most expensive.

42d. The Court erred in holding that the St. Louis Southwestern freight and passenger traffic was more expensive than the Iron Mountain's freight and passenger traffic.

43d. The Court erred in finding the extra expense of intrastate traffic over the interstate freight traffic on the Iron Mountain Road was 210 per cent, and on the St. Louis Southwestern 250 per cent, when the evidence shows that, at the outside, the extra expense of such freight traffic is less than the greater percentage of the revenue per ton per mile of the intrastate over the interstate revenue.

44th. The Court erred in holding that the plaintiff was entitled to earn 6 per cent interest on the value of its property and 1.5 per cent surplus and that a return of less than 7½ per cent on the value of its property devoted to the intrastate traffic was confiscatory.

45th. The Court erred in not holding a return on the plaintiff's investment equal to the rate of interest prevailing on railroad securi-

ties was compensatory, which rates of interest the evidence shows to have been a little less than 4½ per cent on railroad securities in Arkansas.

46th. The Court erred in retaining jurisdiction of this cause for any other purpose than to permit these defendants to show a changed situation which might relieve them of the injunction.

Wherefore for the errors aforesaid, and each and every of them and many more apparent in the face of the record, the defendants, Robert P. Allen, George W. Bellamy and William McKnight, Railroad Commissioners of the State of Arkansas, pray for a reversal of the decree aforesaid and that the Court be directed to enter a decree dismissing plaintiff's bill of complaint and such other relief as equity and good conscience will show the defendants entitled to receive.

ARGUMENT.

The argument of the case will necessarily be principally of facts. There was no reference to a master in this case. The Circuit Court, heard the cast directly, without the intervention of a master. In the case of Knoxville v. Knoxville Water Co., 212 U. S. 1, on page 8, Mr. Justice Moody, speaking for the court, said:

"There can be at this day no doubt, on the one hand, that the courts on constitutional grounds, may exercise the power of refusing to enforce legislation, nor, on the other hand, that that power ought to be exercised only in the clearest cases. The constitutional invalidity should be manifest, and where that invalidity rests upon disputed questions of fact, the invalidating facts must be proved to the satisfaction of the court. In view of the character of the judicial power invoked in such cases it is not tolerable that its exercise should rest securely upon the findings of a master, even though they be confirmed by the trial court. The power is best safeguarded against abuse by preserving to this court complete freedom in dealing with the facts of each case. Nothing less than this is demanded by the respect due from the judicial to the legislative authority. It must not be understood that the findings of a master, confirmed by the trial court, are without weight, or that they will not as a practical question, sometimes be regarded as conclusive. All that is intended to be said is that in a case of this character this court will not fetter its discretion or judgment by any artificial rules as to the weight of the master's findings, however useful and well settled these rules may be in ordinary litigation."

In view of the duty now devolved upon this Court, we can but serve it by trying to bring some order out of the chaos of a voluminous record.

Instead of presenting what each witness has testified, we will attempt to present the subjects discussed and present the opposing

testimony upon each subject. Many witnesses testified upon many subjects, but the subjects can and should be grouped in order.

Before proceedings with the facts on the lines indicated, there are some questions of law and of law and fact, which should be discussed.

INTERFERENCE WITH INTERSTATE COMMERCE.

Confronting Arkansas and the other States is the theory that as a matter of fact—not of law—a system of rates, freight and passenger, promulgated by the State, and effective only on intrastate freight and passenger traffic, may be void as an interference with interstate commerce.

This theory was presented unsuccessfully before Judge Brewer in Ames against Union Pacific Railway Company, 64 Fed. 165, afterwards reported in this court as Smyth against Ames, 169 U. S. 466. Judge Brewer said:

> "Neither can I understand how the reduction of local rates, as a matter of law, interferes with interstate rates. It is true the companies may, for their own convenience, to secure business, or for any other reason, rearrange their interstate rates, and make them conform to the local rates prescribed by the statute; but surely there is no legal compulsion. The statute of the State does not work a change in interstate rates, any more than an act of Congress prescribing interstate rates will legally work a change in local rates. Railroad companies can not plead their own convenience, or the effects of competition between themselves and other companies, in restraint of the otherwise undeniable power of the State."

So far as our investigation has led us, the theory mentioned found no judicial approval until Judge Sanborn's decision of the Minnesota Rate Case. The opinion of so eminent a jurist, his premier position in the judiciary of the Eighth Circuit, and the strength with which his conclusion is stated, requires more than passing notice to the subject.

The question is purely academic so far as the present record is concerned, for if the touch-stone used by Judge Sanborn be applied to the facts in this case, the system of rates promulgated by the Arkansas Commission will not be found, as a matter of fact, to be an interference with interstate commerce. The State in this case could safely lay the facts in this record before Judge Sanborn and expect a favorable decision, but the subject is not academic to the future conduct of the State of Arkansas and its agency, the Railroad Commission. The action of each will necessarily be controlled by what this court says on this subject in this case.

Judge Trieber, in his decision in this case, held that facts found by Judge Sanborn in the Minnesota case were not to be found in this case, and his conclusion was not applicable to the facts here. The same decision was reached in Louisville & Nashville Railroad Com-

pany v. Siler (186 Fed. 176). Notwithstanding the favorable decision, as to the facts in this record, it is felt that the underlying proposition in Judge Sanborn's opinion should be carefully scrutinized.

This, as we understand the opinion, is the predicate for the conclusion which he reached:

> "The State may regulate its intrastate commerce so far only as the exercise of its power does not substantially burden or regulate or discriminate against interstate commerce, but no farther." Shepard v. Northern Pacific Ry. Co., 184 Fed., pp. 769-795.

Can the converse of this be true? May Congress regulate interstate commerce so far only as the exercise of its power does not substantially burden or regulate or discriminate against intrastate commerce?

The powers of the General Government and the powers of the State in the regulation of interstate and intrastate commerce are respectively identical, and unless both the proposition as stated by Judge Sanborn and its converse are true, neither can be true; and it is submitted that these authorities demonstrate it.

In Gibbons v. Ogden, 9 Wheaton, page 1, the respective powers of the State and National governments over commerce—using the term in its most comprehensive sense—were defined. Chief Justice Marshall, speaking for the court, at page 197, said:

> "If, as has always been understood, the sovereignty of Congress, though limited to specific objects, is plenary as to those objects, the power over commerce with foreign Nations, and among the several States, is vested in Congress as absolutely as it would be in a single government, having in its constitution the same restrictions on the exercise of the power as are found in the Constitution of the United States."

Referring to the power of the State, he said, at page 195:

> "The completely internal commerce of the State, then, may be considered as reserved for the State itself."

Again, at page 203, he said:

> "They [referring to 'inspection laws'] form a portion of that immense mass of legislation which embraces everything within the territory of a State not surrendered to the General Government; all of which can be most advantageously exercised by the States themselves. Inspection laws, quarantine laws for regulating the internal commerce of a State, and those which respect turnpike roads, ferries, etc., are component parts of this mass.
>
> "And no direct general power over these objects is granted to Congress; and, consequently, they remain subject to State legislation."

The great Chief Justice evidently foresaw that such a question as this might arise.

He clearly forecasted such a situation as the one now presented:

> "So, if a State, in passing laws on subjects acknowledged to be within its control, and with a view to those subjects, shall adopt a measure of the same character with one which Congress may adopt, it does not derive its authority from the particular power which has been granted, but from some other, which remains with the State, and may be exercised by the same means. All experience shows that the same measures, or measures scarcely distinguishable from each other, may flow from distinct powers; but this does not prove that the powers themselves are identical. Although the means used in their execution may sometimes approach each other so nearly as to be confounded, there are other situations in which they are sufficiently distinct to establish their individuality.
>
> "In our complex system, presenting the rare and difficult scheme of one general government, whose action extends over the whole, but which possesses only certain enumerated powers, and of numerous State Governments, which retain and exercise all powers not delegated to the Union, contests respecting power must arise. Were it even otherwise, the measures taken by the respective governments to execute their acknowledged powers, would often be of the same description, and might, sometimes, interfere. This, however, does not prove that the one is exercising, or has a right to exercise, the powers of the other" (p. 204).

In Cooley v. Board of Port Wardens, 12 Howard, page 300, the controversy over the concurrent powers of the State and the National governments, in the silence of Congress, which had been presented by Mr. Webster and Mr. Oakly in Gibbons v. Ogden and then left undecided, was there determined. Mr. Justice Curtis, page 320, said:

> "It is the opinion of a majority of the court that the mere grant to Congress of the power to regulate commerce, did not deprive the States of power to regulate pilots, and that although Congress has legislated on this subject, its legislation manifests an intention, with a single exception, not to regulate this subject, but to leave its regulation to the several States."

As interstate and intrastate commerce are each accurately determinable and each exclusively in the power of one or the other government, this concurrent power, in the silence of Congress, is not especially important in this discussion, but still it is pertinent because Congress has expressly left to the States the regulation of intrastate commerce. It is contained in a proviso of the Interstate Commerce Act of 1887, (Chap. 104, page 529):

> "Provided, however, that the provisions of this Act shall not apply to transportation of passengers or property or to the

receiving, delivering, storage, or handling of property wholly within one State and not shipped to or from a foreign country from or to any State or Territory as aforesaid."

Thus it is seen that even if the regulation of intrastate freight or passenger traffic are within the power of Congress the Congress has elected to be silent as to its exercise.

In Peik v. Chicago, etc., Ry. Co., 94 U. S. 164, 177, the Court said:

> "As to the effect of the statute as a regulation of interstate commerce. The law is confined to State commerce or such interstate commerce as directly affects the people of Wisconsin. Until Congress acts in reference to the relations of this company to interstate commerce, it is certainly within the power of Wisconsin to regulate its fares, etc., so far as they are of domestic concern. With the people of Wisconsin this company has domestic relations. Incidentally these may reach beyond the State. But certainly, until Congress undertakes to legislate for those who are without the State, Wisconsin may provide for those within, even though it may indirectly affect those without."

In Sands v. Manistee River Improvement Co., 123 U. S. 288, the Court said:

> "The internal commerce of a State—that is, the commerce which is wholly confined within its limits—is as much under its control as foreign or interstate commerce is under the control of the general government."

In L., N. O. & T. Ry. v. Miss., 133 U. S. 588, this court said:

> "It has often been held in this court, and there can be no doubt about it, that there is a commerce wholly within the State itself not subject to the constitutional provision, and the distinction between commerce among the States and the other class of commerce, between the citizens of the single State, and conducted within its limits exclusively, is one which has been fully recognized by this court, although it may not be always easy, where the lines approach each other, to distinguish one from the other."

In Covington & C. Bridge Co. v. Ky., 154 U. S. 204, the Court said:

> "The adjudications of this court with respect to the power of the States over the general subject of commerce are divisible into three classes. First, those in which the power of the State is exclusive; second, those in which the States may act in the absence of legislation by Congress; third, those in which the action of Congress is exclusive and the States can not interfere at all.
>
> "The first class, including all those wherein the States have plenary power, and Congress has no right to interfere, concern

the strictly internal commerce of the States, and while the regulations of the State may affect interstate commerce indirectly, their bearing upon it is so remote that it can not be termed in any just sense an interference. Under this power, the States may authorize the construction of highways, turnpikes, railways, and canals between points in the same State, and regulate the tolls for the use of the same."

Again the Court said, *supra:*

"Congress has no power to interfere with police regulations relating exclusively to the internal trade of the States."

Then the court construes the second class, those which may be termed concurrent jurisdiction, where the States may act in the absence of Congressional action; it is believed that the State power of regulating intrastate railroad rates is not a concurrent power, but if it be considered as such, then the expressed withdrawal of such exercise by Congress would leave the State supreme in controlling such regulation.

Then the Court passes to a consideration of the third power; that in which the action of Congress is exclusive and the State can not interfere at all. It can not be stated more strongly nor more broadly than in the above-given quotations from Chief Justice Marshall.

In the Employers' Liability Cases, 207 U. S. 463, the Court said:

"The act, then, being addressed to all common carriers engaged in interstate commerce, and imposing a liability upon them in favor of any of their employees, without qualification or restriction as to the business in which the carriers or their employees may be engaged at the time of the injury, of necessity includes subjects wholly outside the power of Congress to regulate commerce."

Again, the Court said:

"As the act thus includes many subjects wholly beyond the powers to regulate commerce, and depends for its sanction upon that authority, it results that the act is repugnant to the Constitution, and can not be enforced unless there be merit to the propositions advanced to show that the statute may be saved."

The Court disposes of another contention, as follows:

"It remains only to consider the contention that we have previously quoted, that the act is constitutional although it embraces subjects not within the power of Congress to regulate commerce, because one who engages in interstate commerce thereby submits all his business concerns to the regulating power of Congress. To state the proposition is to refute it. It assumes that because one engages in interstate commerce he thereby endows Congress with power not delegated to it by the Constitution; in other words, with the right to legislate concerning matters of purely State concern. It rests upon a conception that the Constitution destroyed that freedom of com-

merce which it was its purpose to preserve, since it treats the right to engage in interstate commerce as a privilege which can not be availed of except upon such conditions as Congress may prescribe, even although the conditions would be otherwise beyond the power of Congress.

"It is apparent that if the contentions were well founded it would extend the power of Congress to every conceivable subject, however inherently local, would obliterate all limitations of power imposed by the Constitution and would destroy the authority of the States as to all conceivable matters which, from the beginning, have been, and must continue to be under their control so long as the Constitution endures."

In Mo. Pac. Railway Co. v. Larabee Flour Mills Co., 211 U. S. 612, the Court said:

"But the main contention on the part of the Missouri Pacific runs along an entirely different line. It is that the Missouri Pacific and the Santa Fe are common carriers engaged in interstate commerce, and as such are subject to the control of Congress and therefore in these respects not amenable to the power of the State. It appears from the findings that about three-fifths of the flour of the milling company is shipped out of the State, while the other two-fifths is shipped to points within the State. In addition to hauling of empty cars from the Santa Fe tracks to the mill was, if commerce at all, commerce within the State. The road was therefore engaged in both interstate commerce and that within the State. In the former, they are subject to the regulation of Congress; in the latter, to that of the State; and, to enforce the proper relation between Congress and the State, the full control of each over the commerce subject to its dominion must be preserved. Fairbanks v. U. S., 181 U. S. 283. How the separateness of control is to be accomplished, it is unnecessary to determine."

It is not difficult to determine the separateness in these cases. In fact, it has been accurately determined. In the warp and woof of our complicated industrial development, our commerce, interstate and intrastate, move side by side. They are drawn by the same locomotive, handled by the same employees, carried in the same train, and ofttimes in the same car. The passenger from Little Rock to Texarkana sits side by side with the passenger from St. Louis to Dallas, and the tourist from the East to California travels in the same seat with the farmer from his station to his county town. Yet there is no difficulty in separating the commerce. Each package and each car of freight has its own bill of lading. Each passenger has his ticket. The revenues of the company are made up from shipments of freight and passenger fares. The records of the company show definitely, accurately, and precisely, whether each pound

of freight is intrastate or interstate, and the passenger fares are separated definitely, even to the farthing.

The able accountants, representing the State and the raliroads in this case, have gone through the records of the railroad offices containing the record of revenue of intrastate and interstate for a given period. These revenues are the basis of this suit, and their separation into the two classes, intrastate and interstate, have been made to a nicety, and there is no dispute over them. Therefore, the separateness of the traffic is not a feature of this case.

The character of the traffic being fixed, then, under the principles above-quoted, the power regulating each character becomes a known quantity. As soon as a given shipment of freight is ascertained and it is found to be intrastate, it is moved under the intrastate tariff, and this is framed by the Railroad Commission acting under the Constitution and the laws of the State of Arkansas. As soon as an interstate shipment is ascertained, it is moved under a tariff promulgated by the railroad shipping it, and filed with the Interstate Commerce Commission, and subject to the regulations of that Commission.

As soon as a person becomes a passenger he purchases a ticket, and it fixes absolutely whether he is an intrastate passenger or an interstate passenger. Or, if he fail to buy his ticket and pays his fare to the conductor, his fare fixes his character as certainly as the ticket would fix it. The report of the ticket and the cash payment definitely determine the tariff under which each passenger has been carried.

There is no confusion of the powers in such cases as these. There is no converging of the lines. Each line runs parallel throughout its course, with the other. The full force of the contract of shipment as determinative of whether the shipment was intrastate or interstate was considered in Gulf, C. & S. Ry. Co. v. Texas, 204 U. S. 403. It was further held in that case that there was no difference between a passenger contract and a freight contract as determinative of whether the commerce was intrastate or interstate. It seems clear that, when the commerce is accurately differentiated as it is here, and the character of the traffic determined absolutely and its class definitely ascertained, the power of regulation over that class being accurately defined in the authorities quoted heretofore, there can be no room for a question as to the power of regulation applicable to each.

The power of the State to regulate internal, or as it is more commonly called, intrastate, commerce, is as exclusively in the State as if there were no other government existing, so far as this question is concerned—of course, over all State and National regulation, the guarantees of the Federal Constitution against the taking of property without due process, impairment of the obligations of contract, etc., exist supremely; but assuming that no other provision of the Constitution is violated, the commerce clause is no more violated by State regulation of internal or intrastate commerce, than if there

were no Federal Government, and the State alone were the sovereign power.

On the other hand, owing to the Commerce Clause, the Congress may regulate interstate commerce wherever it goes as completely and as exclusively as if there were no State governments whatsoever. If, in the exercise of these two distinct powers over the two distinct classes of commerce, there comes an impingement, it is one of those results which naturally follow from our dual system of Government; but the power of each government can not be abridged because in the due exercise of it, an indirect effect may be had upon the regulation of the other government in its own sphere. These are the indirect and incidental interferences so often referred to, that can not be avoided, nor remedied, and must be endured by those who may suffer from them, but they do not constitute a direct interference with the power of the other, which the Constitution equally guards.

Therefore, we submit that the power of the State over its internal commerce can no more be hampered by its incidental and indirect effect on interstate commerce than the power of Congress over interstate commerce can be hampered by the State regulation of intrastate commerce.

INTERFERENCE WITH INTERSTATE RATES.

So far as we can recall the testimony, there can be a claim of the intrastate rates interfering with the interstate rates in only four instances, out of the many thousand rates in controversy, and each of those will be examined in order to ascertain whether it is an interference within the meaning of Judge Sanborn's decision, if it be accepted as sound. Mr. Charles L. Stone, Passenger Traffic Manager of the Missouri Pacific and the Iron Mountain railways, testified that when the local rate in Arkansas was reduced from three cents to two cents a mile, that the passenger traffic department immediately began to work on interstate tariffs, and put them into effect as soon as possible, using the two-cent rate as the basis in the State of Arkansas. After the injunction was granted by Judge VanDeventer, the rates were put back to three cents and the interstate was readjusted upon that basis (R. p. 266). Mr. Stone claims that when the rate per mile in Arkansas was reduced by the Legislature from three cents to two cents, that it had the effect of making various reductions between border points into the State of Arkansas, numerous intsances of which he gave (R. p. 270), and that these reductions had the effect of reducing interstate rates between the territory which he outlined upon the map attached to the testimony as exhibit 24. He was asked when the rates were put back to three cents a mile, if he increased the interstate rates correspondingly, and he said that his road did so where it was upon its line, but in the territory indicated there were several other lines interested, and the other roads

had to join in a corresponding advance (R. p. 271). He said California rates were not affected very much by the change in Arkansas; that that was a rate fixed by competition, and based upon the rates fixed by another road (R. p. 271). He says, with some exceptions which he mentioned, there was no change in the transcontinental rates by reason of the reduction to the two-cent fare in Arkansas (R. p. 272), and of these, the homeseekers and excursion rates are about one and one-half cents per mile (R. p. 272), and the other transcontinental rates are about two cents per mile; and there is also a colonist rate, the figures of which he does not give, but which is presumably lower than any of the others. He was asked if all the interstate passenger traffic crossing Arkansas was not at the rate of about one and one-half cents a mile, and said he thought not, but said he could not give the exact figures, and stated that in his opinion it would average about two cents per mile (R. pp. 273, 274). On redirect, he took back the broad statement that the average interstate rate was about two cents per mile, and stated that he thought that was only true of special rates, homeseekers' rates, excursion rates, etc. (R. p. 275). Then the statistics of the case were shown to him as prepared by Mr. Johnson, the statistician of his road, and it was shown that the interstate passenger rate was 1.865 (R. p. 276). We have gone somewhat tediously into Mr. Stone's testimony because we believe it reduces the proposition that State passenger rates interfere (in its legal sense), with interstate rates to an absurdity. The average interstate rate through Arkansas is less than two cents. Many of these rates were one and one-half cents, or less, yet it is claimed that because Arkansas reduces its rate from three cents to two cents that interstate rates were interfered with by that fact, when their level was less than the reduced State rate. Mr. Stone gives numerous examples of a reduction of rates from a point close to the border to a point within the State made by the railroads immediately after the reduction by the Legislature of the passenger rates to two cents. This was evidently done because a passenger might get off at the station nearest the line and buy another ticket; but there was no compulsion, other than the convenience of the railroad in making these rates; there was not even competition to compel them, and where competition existed, the rates are much under the level of those established by the State; yet, because the State established a rate higher than the average interstate rate, it is seriously argued by this witness that this is an interference with interstate commerce.

2. Much testimony has been given touching the sugar rate. It will be somewhat tedious to refer to it by pages, and as there is really no controversy over the facts, it can be stated in such a way that the court will grasp it without turning to the record. There was a rate on sugar from New Orleans to Helena, Arkansas, of ten cents per cwt. The ten-cent rate also extended to Memphis, Tennessee. There was a rate from New Orleans to Texarkana, Arkansas,

of 26 cents, and to Fort Smith of 26 or 27 cents. The merchants in Fort Smith and Texarkana complained of this rate to the Railroad Commission. Merchants at Helena also appealed to the Commission for a reduction of the sugar rate in Arkansas. Three hundred miles was the longest mileage upon which the Arkansas Commission fixed rates, as that distance was supposed to cover the longest haul possible within the State. The Railroad Commission, after investigating the matter, concluded that if the railroads could haul sugar from New Orleans to Memphis for 10 cents, a distance of about 600 miles, that they could haul sugar for 300 miles in Arkansas for 13 cents. One of the Railroad Commissioners testified that one of the reasons in fixing this rate was to enable the people of Texarkana and Fort Smith to get a reasonable sugar rate, and that the rates that were in force to both places were, in the opinion of the Commission, unreasonable. The Commission could not regulate the rate from New Orleans and could only regulate the rate within the State, and this the Commission did, and only this, reduced the sugar rate from 15 cents, which it had been theretofore to a maximum of 13 cents for a 300-mile haul in Arkansas. The result was that sugar could be shipped from New Orleans to Helena for 10 cents, and reshipped from there to Texarkana or Fort Smith for 13 cents, making a rate of 23 cents to those points, or several cents per cwt. less than the rate made by the railroads. The railroads could then have done one of several things: They could have raised their rates to Helena, or they could have let the rates stay as they were to Texarkana and Fort Smith, and allowed sugar to be shipped via Helena to Fort Smith and Texarkana for 23 cents, or, they could have reduced the rate from New Orleans to Texarkana and Fort Smith. That was a situation wholly within their hands. The only interference, if interference it could be called, with any interstate rate, was in enabling shippers at Helena to avail themselves of the interstate rate to that point, and a State rate to Fort Smith and Texarkana. If the railroads objected to this course, all that was necessary for them to do was to raise their rate to Helena, or lower it to the other points. Either their rate to Helena was too low, or the Fort Smith and Texarkana rates were too high. The Arkansas rate could not be questioned as unreasonable, for it was higher than the rate for the haul from New Orleans to Helena and Memphis, a haul of about double its length. It may have worked an interference with the discriminative rate in favor of Helena and Memphis against Fort Smith and Texarkana, but it did not interfere with any legal or moral right of the railroads.

3. It was in testimony from Judge Wallace, one of the Railroad Commissioners, that in 1900, when the Commission Tariff was first put into effect, that it caused a material reduction in the rates in Washington and Benton counties, Arkansas. There are only small towns in those counties. The Government census shows that Rogers

and Fayetteville are the principal ones, of about 2,500 and 5,000 respectively. These towns had been buying their goods from Springfield, Missouri, although Fort Smith, Arkansas, a jobbing center of about equal importance, was nearer to them, owing to the railroad rates being lower from Springfield to those towns. When a graduated distance tariff was put into effect it enabled Fort Smith to reach that territory, though its shorter distance giving it better rates. In that way the interstate commerce to Springfield was disturbed; in other words, the railroads had been favoring Springfield by giving it a lower rate than the other jobbing center nearer to this territory, and equitable rates were put into effect, and that favoritism was disturbed thereby, and interstate commerce was interfered with.

4. Mr. J. D. Watson, Assistant General Freight Agent of St. L. S. W. R. Co., put into evidence exhibit 51, which shows a decrease in rates in certain territory south of Pine Bluff, between April, 1900, and September, 1900, owing to Standard Distance Tariff No. 1, which became effective April 10, 1900.

These are rates from Memphis, Tennessee, to about 33 stations on the lines of the road south of Pine Bluff.

Owing to the rates from Pine Bluff and Little Rock, both jobbing towns, to these points being fixed by the Standard Distance Tariff, and the differentials between Memphis, St. Louis and Kansas City and Little Rock being fixed, as shown in exhibit 50, at definite sums, the Memphis rate to these 33 points had to be lowered in order to meet competition from Little Rock and Pine Bluff. This was also a situation wholly in the control of the railroads. They made their differentials from one city over another to preserve a trade balance—or, more properly speaking, a railroad-carrying balance between them. These differentials may or may not be good policy; much can be said for and against them, but it is sufficient here to say that they were absolutely voluntary on the part of the railroads, and to promote their own traffic. If they did not wish to preserve these balances, then they could or not, as they pleased, put in rates to these points complained of. If these rates put in were compensatory, they have lost nothing; if they are not compensatory, then it was bad management to put in rates to carry traffic at a loss. The fact that they put them in September 6, 1900, and continue them to this date is fairly good evidence that they are compensatory. Mr. Watson explained fully that it was all "up to the railroad" to meet or not meet a competitive rate. If the railroad thought it good business to make the lower rate, it did so; or, if it did not, it could refuse to meet it and carry the freight at a compensatory rate, or not carry it at all. This is one of the rights of the railroads, which they freely exercise, and no rate made by the Arkansas Commission, has or can affect that right.

It doubtless will occur that any system of rates promulgated by a railroad, an association of railroads, or a State Commission, will

have an effect produced on other systems of rates promulgated by any other rate-making body, whenever the rates touch or connect. Precedent alone has an effect, and competition and commercial conditions a controlling effect, but the interferences or influence or control of one set of rates over another set is produced by the precedent, the competition or the trade conditions.

Had these rates complained of been promulgated voluntarily by another railroad, the effect would have been exactly as claimed the Commission-made rates affected the Memphis rate. The only difference is that the Commission-made rates were on a distance scale and there was no playing of favorites.

DIVIDING THE PROPERTY ON THE REVENUE BASIS.

Meeting the plaintiffs at the threshold of the case is the necessity of dividing the property in the State of Arkansas between the intrastate and the interstate traffic. This is done in the exhibits filed by the railroads upon a straight revenue basis. To illustrate, if 20 per cent of all the revenue in Arkansas was from intrastate business, 20 per cent of the property in Arkansas would be assigned to intrastate business, and the remainder assigned to interstate and miscellaneous. Assuming the miscellaneous to be 10 per cent, that would leave 70 per cent assigned to interstate traffic. In exhibit No. 5, filed by the Iron Mountain railroad, it is shown that its intrastate freight revenue was 13.377 mills per ton per mile, and the interstate freight revenue was 6.750 per mills per ton mile, figured during the six months ending December 30, 1907, the period of inquiry in these cases; and the St. Louis Southwestern is 20.945 per ton per mile for intrastate, and 8.665 for the interstate. In round numbers, the Iron Mountain intrastate freight revenue is 100 per cent. more than the interstate, and the St. Louis Southwestern 140 per cent. more. For facility in analyzing the proposition the Iron Mountain figures alone will be used. Exhibit No. 5 also shows that the total intrastate freight revenue was 13.41 per cent, and the interstate freight revenue was 86.59 per cent of all freight revenue, and that the intrastate ton miles was 7.25 per cent, and the interstate ton miles were 92.75 per cent of the total tons mile. To put the proposition in other words, it was this: The ton miles represented the use made by the intrastate traffic of the railroad; this was 7 per cent of the whole; while the earnings from that 7 per cent represented 13 per cent of the total earnings from freight traffic. The revenue from the intrastate traffic being nearly double that of the interstate traffic, on the Iron Mountain, and much over double on the St. Louis Southwestern Railway, almost doubles in the one case and much over doubles in the other the amount of property assigned to the State for doing an equal amount of business. The amount of extra cost of intrastate traffic comes up as a matter of expense. For

illustration, if the extra cost of intrastate freight traffic was one hundred per cent, and the revenue is 100 per cent more, then the extra cost is taken care of by the amount of revenue over the interstate equaling to the extra cost. When the revenue from the intrastate traffic is used to divide the property, it is assigning double the amount to the State in the Iron Mountain case, and thereby the State is twice mulcted, once in dividing the property, and again in dividing the expense. Conceding that it is right to so divide the expense, and that the extra amount assigned to the State on account of the higher revenue only compensates for the extra cost of the intrastate traffic, yet, if that extra cost does not exceed 100 per cent, then when the same factor is used to divide the property, 200 per cent has been charged to the State. This is manifestly unfair unless the extra expense is 200 per cent, and, if so, then the extra cost should not be added in pursuance of testimony of the operating officials who give it as their opinion that there is an extra cost of 100 to 800 per cent. These questions were not before Judge VanDeventer. The revenue per ton per mile, either State or interstate, was not put before him. He merely found the extra expense to be 100 per cent for the intrastate freight, and there was no evidence before him that that was cared for by the excess in the revenue when used as a factor to divide expenses. Judge Trieber said, at page 325, 187 Fed.:

> "Whether the ton mile, car mile, train mile, or revenue basis is adopted to arrive at correct results, it is necessary to ascertain the relation of the tariff rates charged for the interstate business and those charged for the intrastate business; for, if the latter are sufficiently high to make up the difference in cost found to exist between the two, then that difference has been fully provided for, and to make any additional allowance therefor would be doubling the cost, and to that extent doing an injustice to the State."

Judge Trieber finds, for the reasons stated in his opinion, that intrastate freight revenue per ton per mile is as above-stated, yet, as a matter of fact, that the intrastate tariffs were only 50 per cent higher than the tariff rates for the interstate traffic per ton per mile (*Id.* p. 330). Why the learned judge rejected the actual statistics and adopted the rates as a test, is something we are unable to understand, and it will be discussed hereafter. Be it as it may, whether we accept the statistics of the revenue on the Iron Mountain, that it is 100 per cent higher for the intrastate than the interstate business and 140 per cent on the St. Louis Southwestern, or accept Judge Trieber's theory that the rates were only 50 per cent higher, still, a grave injustice is done to the State in using the revenue with which to divide the property, whether the higher percentage be 50 or 100, or 140, the injustice is plain, its degree only uncertain. Suppose a railroad in Arkansas was valued at $1,000,000.00, and it was wholly a freight-

carrying road: Its annual expenses were $500,000.00. Twenty per cent of its revenue was from intrastate traffic, and 80 per cent from interstate traffic. Ten per cent of the ton miles was intrastate and 90 per cent interstate. If the ton miles are used as a basis to divide the property and expenses, 10 per cent or $100,000.00 would be set aside as the proportion of the property used by the intrastate traffic. Using the same factor to divide the expense, $50,000.00 would be set aside as representing the expenses of intrastate traffic. If the testimony convinces the court that it cost twice as much to earn a dollar in intrastate traffic as it does in interstate traffic, then another $50,000.00 should be added to the expense thus ascertained, making the total intrastate expense $100,000.00, and interstate expense $400,000.00. This 10 per cent of the ton miles, however, owing to the rate per ton per mile being twice as high for the intrastate as the interstate, has earned 20 per cent of the revenue. If the revenue is used as the factor, then $200,000.00 is set aside as the proportion of the property devoted to intrastate traffic, instead of $100,000.00 if the ton mile is used; and $100,000.00 is set apart as the expenses of the intrastate traffic. If the intrastate traffic cost twice as much as the interstate traffic, then the correct amount has been set apart as the intrastate expenses. The higher rate has taken care of the added cost, but the other side of the equation has not been cared for. Two hundred thousand dollars of property has been set aside to the intrastate traffic by reason of the double amount of revenue earned in that traffic over the interstate. Whatever may be the solution or the proper adjustment of the expenses between intrastate and interstate traffic, the solution of the division of property has not been reached in applying the revenue as the basis therefor. The actual figures in these cases are practically the same as those given in the illustration above. The intrastate ton one mile was 7 + per cent, the interstate being 93—, while that of the interstate revenue derived from that 7 per cent was 13 per cent. Putting it in other words, the State freight business in volume is 7 per cent of the total, and in revenue 13 per cent of the total. Thirteen per cent of the property is assigned to intrastate business, while it only represents 7 per cent of its use. Mr. McPherson used the apt expression that the revenue does not represent the use, but the result of use. The result of use here is that owing to the higher State rate, 7 per cent of the volume of the traffic has earned 13 per cent of the revenue, and 13 per cent of the property is set aside as representing the intrastate property while, as a matter of fact, only 7 per cent of it was used. What is the proper factor to divide the property by is a question of great difficulty. It is not for the State in this case to work out that problem; it has tried to work out a good many problems for the railroad herein, but has not attempted to work out this one, but has attempted merely to show the absolute inaccuracy and injustice of adopting the plan presented by the railroads. When we demonstrate that to be

wrong their case necessarily fails. The learned experts who testified on behalf of the railroad in their case in chief as to the revenue being the proper basis, Messrs. McPherson, Nay and Doddridge, gave but scant attention to the problem of dividing the property. Their attention seemed to be wholly directed to the problem of dividing the expenses and except in a few passing remarks including property with expenses, there was absolutely no argument made by them in favor of the revenue theory of dividing the property. They offer many criticisms of the ton mile theory of dividing the expenses. Much of it, if not all of it, the State may heartily agree to, and it tried to meet all the valid objections against the ton-mile theory, in its plan of division and only used it to divide train expenses, after the expenses of the two classes of trains had been equalized; and that was the use to which some of these learned witnesses for the railroads have said was a proper use of the ton mile.

Mr. McPherson, at pages 307-320, discusses many objections to the ton-mile basis, all of which go to its use for dividing expenses. None of his criticism of it is applicable if it be used as a basis with which to divide the property. It would seem more logical to use it as a basis for dividing the property than to divide the expenses, for the expenses do not result from the ton mile. As Mr. McPherson says it represents the cost between stations, and does not represent the cost of terminals, and many other costs which he enumerates. These must be cared for in other ways, upon some such plan as that adopted by the State in this case, which properly allocates each item of the expenses; but the ton mile represents ultimately the use of the railroad by its freight traffic. The passenger miles represent the passenger use of a railroad. If the ton mile was used to represent the use of the property, it would be a fairly accurate factor, probably more so than any other factor that could be used for this purpose. It would represent exactly the use of the property by the freight traffic. It might be that some station property would not be represented in this, but the station property, so far as freight traffic is concerned, is purely auxiliary to the ton miles of freight carried. We submit, for the consideration of the court, that the ton mile might be a fair basis upon which to divide the property. Certainly it is true that the revenue basis where the revenue for the intrastate is so much greater than that for the interstate as it is in this case, and where the revenue represents double the amount of the use of the property as represented in ton miles, it can not be a fair factor with which to divide the property between the State and interstate traffic.

The railroads are practically without evidence to support the revenue basis as the proper one for dividing property, and the State has, with many witnesses, pointed out and, we believe, proved its unreliability. The expense basis has been suggested by some of the State's witnesses, but it, too, has been criticised, while others have pointed out the ton mile as the logical basis. It is not the duty of

the State to find a basis; the burden is on the railroads to produce one which satisfies the court clearly that it fairly divides the property between the State and interstate traffic.

Surely it can not be said that a basis which, owing to the fact that the State revenue is 98 per cent higher per ton per mile than the interstate, is a fair basis when it automatically sets apart to State traffic 98 per cent more property than it would set apart if intrastate and interstate revenue were the same; and when it is shown that the intrastate traffic only amounts to 7 per cent of the whole traffic, then it becomes indubitably certain that a formula that assigns for the use of 7 per cent of the freight traffic, 13 per cent of the property which is 98 per cent more than would be assigned if the revenue of the two classes of traffic were even, is unquestionably wrong.

SUIT PREMATURELY BROUGHT.

In the motion to dissolve the injunction, the defendants set forth in paragraph 4 reasons why these suits should not be maintained until after an application to the Railroad Commission had been fruitless. This paragraph was stricken out of the motion without an opinion from the Court, but at the hearing on the merits the question was again presented to the Court and decided against the State, for the reasons given by Judge Trieber in his opinion, at pages 306, 307, in 187 Fed. Reporter. His ruling thereon is made the basis for the first three assignments of error. Judge Trieber quotes an excerpt from the testimony of Mr. Hampton, one of the Railroad Commissioners, to the effect that all the reductions made by the Commission were after public hearings, to which the railroads were invited, and which they attended and most always against their protest and objection. But this was said concerning the few reductions made by the Commission from the promulgation of the Standard Distance Tariff, April 10, 1900, till it was enjoined by Judge Vandeventer, September 3, 1908. Mr. Hampton and Mr. Swaim fully explained each of these reductions and their trifling effect upon the revenue as a whole. There were joint rates made in 1900, but these were declared invalid on account of lack of power in the Commission, which was given to it by the Legislature of 1903, and the joint rates re-enacted.

Exhibit "B" gives all the changes subsequent thereto. A glance over it will suffice to show how trivial were the changes, considering such a vast body of rates existing from 1900 to 1908.

When it is remembered that the intrastate freight revenue produced from this tariff for six months was $640,248.17 (exhibit "5"), it will readily be seen that all these changes could not have affected it appreciably. The evidence is undisputed that from a revenue standpoint these changes were wholly immaterial. Necessarily such minor changes should be made in any comprehensive system of rates. Exhibit "D" shows the granting of many orders on the request of the

railroads and the denial of many complaints of individuals seeking relief against the railroads.

The history of the promulgation of the first tariff is derived from the testimony of Judge Wallace, a distinguished jurist of the State, a member of the first Commission and once its chairman. (R. pp. 875-896.)

Briefly stated, the system was put in after long conferences with the railroad traffic officials and after many increases and changes from a tentative tariff had been made at their instance. The railroads were told that the system was an experiment, the Commission believed a good one, but if it worked harshly and proved noncompensatory the railroads were assured the Commission would correct it and make such changes as were needed to correct any errors or injustice in it. Judge Wallace served on the Commission several years after this, and tells of the great reform the Commission rates worked in abolishing special rates and favoritism of localities and persons; and he attributed much of the succeeding prosperity of the railroads to them; and so far as he knew the railroads were fairly well satisfied with them; they came back with no request for relief. Mr. Hampton, who served from the time Judge Wallace retired until the injunctions were granted, testified that the railroads asked no relief of the Commission, and he, too, was led to believe that the general scheme of rates was satisfactory and compensatory. Judge Wallace, Mr. Hampton, Mr. Allen and Mr. Crockett, the succeeding members, all testified that the Commission would have granted relief to the railroads at any time they applied therefor and satisfied them that the rates were too low or unreasonable or unjust. Instances were given, and the record as shown in exhibit "D" prove them, where, upon proper showing, relief was granted railroads, such as increasing the oil rate, applying the tariff to roads desiring it and denying petitions of complaining citizens, etc. And the Commission refused to reduce the passenger fare from 3 cents to 2½ cents per mile.

All of this testimony is undisputed, directly or indirectly.

The procedure before the Commission is judicial. Any person or corporation may object to any tariff approved by the Commission and a hearing after notice shall be had; they shall hear the parties in person or by attorney or both; may take testimony, administer oaths and regulate arguments and conduct investigations in such a manner as to arrive at the truth. It is further made the duty of the Commission, in fixing or changing rates, to take into consideration the character or nature of the service to be performed, the entire earnings of the roads, the expense of operating the same and the revenue and value thereof. All of this is set out in paragraph 4 (R. pp. 58, 59), heretofore quoted.

We submit that the principle of Prentiss v. Atlantic Coast Line Co., 211 U. S. 210, should apply here.

Rates are legislative work, not judicial, whether made by Commission or Court; and whether they are constitutional or void is a mere matter of fact—not of law. The railroads can not be denied the right to try these facts before a court of their choosing which has jurisdiction. But before resort should be had to the courts, the complainants must make it "absolutely certain that the officials of the State would try to establish and enforce an unconstitutional rule." The comity which the judiciary extends to the legislative department calls for this, and *a fortiori*, the comity which a Federal Court extends to State legislation insists upon this action.

This is not a case of "keeping a previous watch upon the bodies that make laws, and using every effort and all the machinery available to prevent unconstitutional laws from being passed." The Legislature has wisely relieved the carriers of that unsatisfactory remedy and provided a forum and judicial procedure to work out this delicate legislative function of rate-making.

The Virginia Constitution went one step further than ours in giving an appeal from the Commission to the Supreme Court of Appeals, but the Court of Appeals, when hearing such appeal, would be performing a legislative function, and it is the fact that the State has provided a forum for final legislative action and provided process and procedure for adjusting rates equitably that the Federal Courts fail to interfere until the State tribunals evince a determination—after such hearing—to inflict confiscatory rates upon its carriers; and then resort to the Federal Court is right and proper.

Save alone an appeal to the appellate court the laws of Arkansas safeguard the railroads as fully against unconstitutional enactment as the laws of Virginia. In the Prentiss case the railroads went before the Commission with their evidence, but failed to exercise their final right in the State tribunals by appealing to the Court of Appeals. They were denied a hearing in the Federal Court until they exercised their right or attempted to do so. In this case they presented no petition to the Commission, they offered no evidence there. They failed to take the primary step for relief in the State tribunal and should they not be denied hearing in the Federal tribunal sitting in equity until they exhaust the remedy provided by the laws of Arkansas?

What was said in the Prentiss case is equally true here:

"It seems to us only a just recognition of the solicitude with which their rights were safeguarded that they should make sure that the State, in its final legislative action, would not respect what they think their rights to be, before resorting to the courts of the United States"

The facts here present much stronger equities than the Virginia case. Those were new rates, and resort to the final remedy in the State tribunal was required. These were old rates, long acquiesced in, and put in after the roads had been consulted and were largely

instrumental in framing them and under solemn promise that any injustice in them would be corrected. The good faith of the promise is not questioned; that the successors of the Commissioners who made it were ready to redeem it was undisputed; that their actions showed judicial fairness in disposing of other issues, for and against the roads, was undenied.

The passenger rates had been taken out of their jurisdiction, but the power to increase freight rates to compensate for any loss on passenger rates was unquestionably with them, and would have been exercised on petition and proper showing; is established.

Judge Trieber says that the Prentiss case is fully explained in Willcox v. Gas Co., 212 U. S. 19. True, and, it may be added, emphasized. The action there was leveled against two acts of the Legislature of New York, and not against a system of rates made after hearing by a body clothed with power and required by law to alter them, after hearing, to make them compensatory, and provided with machinery to determine the questions judicially, and more effectually than a court, whose duties forbid an exhaustive examination into details so necessary to make reasonable rates.

It is respectfully submitted that these plaintiffs have not accorded to the State, which protects their property and furnishes them a tribunal to correct what they claim are noncompensatory rates, with decent respect when they ignore this tribunal and bring to the Federal Courts matters which properly should be adjusted there.

QUANTUM OF PROOF NECESSARY TO SUSTAIN AN ATTACK ON THE CONSTITUTIONALITY OF THE RATES.

We contend that the evidence on part of the plaintiffs fails to meet the heavy burden of proof which this court has laid upon those seeking to invalidate as unconstitutional State enactments.

In San Diego v. National City, 174 U. S. 739, on page 759, the Court said:

> "Judicial interference should never occur unless the case presents, clearly and beyond all doubt, such a flagrant attack upon the rights of property under the guise of regulations as to compel the Court to say that the rates prescribed will necessarily have the effect to deny just compensation for private property taken for the public use."

In the case of the City of Knoxville v. The Knoxville Water Company, 212 U. S. p. 1 (these excerpts are to be found at pages 8 and 16 and 17), the Court said:

> "There can be at this day no doubt, on the one hand, that the Courts on constitutional grounds may exercise the power of refusing to enforce legislation, nor, on the other hand, that that power ought to be exercised only in the clearest cases. The con-

stitutional invalidity should be manifest, and where that validity rests upon disputed questions of fact, the invalidating facts must be proved to the satisfaction of the Court."

The opinion continued, as follows:

"Disregarding for the moment all the errors which were committed in the Court below, the decision of this cause may be rested upon a broader ground, which is clearly indicated by the previous judgments of this Court. The jurisdiction which is invoked here ought, and as has been said, is to be exercised only in the clearest cases. If a company of this kind chooses to decline to observe an ordinance of this nature and prefers rather to go into Court with the claim that the ordinance is unconstitutional, it must be prepared to show to the satisfaction of the Court that the ordinance would necessarily be so confiscatory in its effect as to violate the Constitution of the United States."

In *Ex parte Young*, 209 U. S. 123, the Court said:

"To this it may be answered, in the first place, that no injunction ought to be granted unless in a case reasonably free from doubt. We think such rule is, and will be followed by all the Judges of the Federal Court."

The presumption of the validity of State-made rates is strengthened by the long time in which these have been in force. In Judge VanDeventer's opinion, rendered when granting the temporary injunction in this case, he said:

"True, some of the rates in question have been in force in substantially their present form for a considerale time, but enough of influence is accorded to this fact when it is made a reason for requiring stronger and more persuasive proof of inadequacy than otherwise would be required." (R. p. 42.)

[In passing it may be noted that on the hearing before Judge Vandeventer it was not developed that all the freight rates, except a few minor changes, had been in force eight years, and that the passenger rates had been in force fifteen months, and the average interstate revenue from passenger traffic through Arkansas was less than the two-cent rate complained of.]

The proof of the inadequacy of the freight rates should be very persuasive in this particular case in the light of their history. The history of these rates as developed in the record shows this: The Railroad Commission was organized in 1900. It began to work upon the rate situation shortly after its organization. And the Commissioners spent some six months or longer in investigating the situation before they took any affirmative action to establish a system of intrastate freight rates.

They finally promulgated a tentative system of rates and invited the railroads of the State to a conference with them to consider this tentative system of rates, which they had drawn up.

That conference lasted some three or four months, and the rate situation was thoroughly reviewed. This tentative system was changed and almost universally raised, at the request of the various representatives of the railroads who were in conference with the Commission, who attempted to show them where this rate or that rate should be higher than set forth in the tentative system which they had been invited to consider.

After many concessions had been made by the Commission, after the railroads had been heard fully, and their opinions given great weight and effect in the schedule of rates prepared, the first Standard Distance Tariff of class and commodity rates was issued in the year 1900.

At the time of its promulgation the Commission notified the railroads, more particularly the two now before the Court (it is shown that their representatives were in constant conference with the Commission throughout this period), that this system of rates which they were then putting into force was an experiment; that the Commission could not tell and the railroads could not tell, until it was tried, whether it was compensatory or not; but the Commission believed from all the information before it and by a careful comparison with the rates prevailing in other States similarly situated to Arkansas, that it would be a fair scale and just to the railroads; it told the railroads that if it proved noncompensatory; if their anticipations of it were not realized, for them to bring the matter back before the Commission and they would readjust the rates. (See Judge Wallace's testimony, R. pp. 875-896.)

The first tariff put in the distance schedule on one line and also on the joint lines.

The railroads contended that the Commission did not have a right to make joint rates and they brought an injunction suit, and their contention was sustained that the act investing the power to make the rates did not allow the Commission to make joint rates over two railroads.

The Legislature of 1903 passed an act giving the Commission this power.

Then the Commission adopted joint rates on a basis of 80 per cent of the sum of the locals. When the joint rates were made they likewise were made after conference, suggestions and advice from the railroad traffic officials. (Testimony of Hampton, pages 800-810.) Therefore, the whole rate situation was put in force after the passage of the act of 1903; but the substantial part of it, the part which really tells the story, has been in effect from 1900 until the injunction granted by Judge VanDeventer in the summer of 1908.

It is in evidence here that during that time there were changes; however, there had been no substantial change as a revenue-producing factor from 1900 until 1908, when the rates were enjoined.

Some attack was made in argument and on cross examination of

the Commissioners as to the constant orders which had been made upon complaint of shippers and others; and there was put in evidence, and it is here as exhibit "D," not only the petitions which had been granted, which tended to reduce the rate by a change from class to commodity rates, which is exhibit "B," but the various acts of the Commission which denied action against them; exhibit "D."

There was a petition before the Commission to put in a 2½-cent passenger rate. There was much more involved in that to the railroads than all of the reductions which had taken place in the seven years; and the Commission declined to grant the petition of a large body of citizens who asked them to put in force a 2½-cent passenger rate.

When you consider the evidence which seeks to strike down a system of rates, you must consider this long period of time in which the railroads operated under them. You must consider the fact that they were told it was an experiment, and that if they found it unremunerative, then to come back to the Commission and they would adjust it; and you find in the proceedings of the Commission herein every evidence of judicial fairness.

When you consider those facts, this acquiescence becomes a strong factor. It has passed beyond mere test of rates to see if they were reasonable. It has passed into an acquiescence after eight years' operation under the rates put in force by the State.

Instead of going back to the Commission to show that these rates were unremunerative, the railroads go to the courts.

This Court will apply the principles announced in the cases we have quoted and require of these plaintiffs the clearest and most decisive proof of the fact that the State-made rates work confiscation, before they will be invalidated, and will further raise a strong presumption of their validity based on the carriers' acquiescence in their continuance. Weighing the evidence in the balance with these requirements upon one side of the scale, we contend that the evidence of the plaintiffs utterly fails to balance with them, and insist that this is apparent from an examination of the exhibits in this case, without the necessity of the Court going through the detail of the evidence. We do not take the law to be that the Court must strike an account between the railroads and the State, as would a Master in Chancery stating an account in the winding up of a partnership business.

Furthermore, the plaintiffs are asking the court to give a weight to opinion evidence to which it is not entitled and which has not heretofore been accorded to it.

Opinion Evidence Insufficient.

In Chicago, Milwaukee & St. Paul Ry. Co. v. Tompkins, 176 U. S. 167, objection was made to the opinion testimony there introduced. The testimony there objected to was the opinion evidence of several experts as to the relative cost of doing local and through business.

There the Court reviewed the well-known facts in the movement of local and through trains and the obviously greater cost of the movement of the local train, and properly held that the opinion of experts familiar with railroad business is competent testimony, and can not be disregarded simply because it can not demonstrate by figures the difference in the cost of the operation of such trains. Such expert testimony gives the Court the benefit of the experience and observation of a witness familiar with the operation of such trains and the attendant cost of the operations of each, and from such opinion evidence a reliable, if not accurate, percentage of difference could be determined.

Much of such testimony was introduced in this case, leading up to the proposition that the intrastate traffic is chiefly carried on the local train, which is the more expensive train, and is the vehicle for the intrastate traffic, while the interstate traffic is carried on the through train, more economically operated. It was competent for the State, in order to meet it, to show by men versed on the subject that the estimates were over-high; or it was competent to show, as was done, that conditions in Arkansas did not square with the conditions which the experts introduced by the railroads say are the prevailing conditions as to intrastate and interstate traffic, and concerning which they testified:

It was shown in this case that the local freight train, instead of being a vehicle of intrastate traffic, was more nearly the vehicle of interstate traffic. Upon the one road its load being 72 per cent interstate freight and upon the other 68 per cent. The competency of expert testimony as to the comparative cost of the two trains is not for a moment questioned; but this class of opinion testimony is a small part of the opinion testimony necessary in order for the plaintiffs to establish their case.

The plaintiffs' experts say the ton-mile and passenger-mile theories, presented in other cases, are unsound, and they say in surrebuttal that the plan of separating the expenses worked out by the State is unreliable and impracticable.

The railroads predicated their case in chief, and from that position they have not wavered, that the revenue basis is the best basis yet found. They admit that it is an arbitrary basis and admit that many objections can be taken to it in individual cases and many instances may be cited where it will not be perfect; but on the whole they say it is the best basis yet found. They admit that it is not in common use as a factor in railroad operation and accounting and admit that it originated in rate litigation and in State regulation of railroads.

They offer no other basis for the division of property. They do try to patch up in their surrebuttal testimony a division of expenses on the plan of the State exhibits, which effort upon their part is so

plainly a caricature of the State plan that it has not been given serious consideration, either by them or the State.

Before they can determine upon what property they are entitled to a return, which is compensatory, they must segregate that property from the mass of property in the State and say: "This is property devoted to intrastate traffic upon which we are having no adequate return." Until they find some basis for that, they have no case. Until they segregate their expenses and say, "Thus much is intrastate expense, and thus much interstate expense," they have no method of determining whether the revenue from intrastate business is compensatory or confiscatory. After they find a basis, which they say is the revenue basis, to separate the property and separate the expense, then they ask that to the intrastate expense thus separated there be added a given per cent on account of extra cost of intrastate traffic, and to that proposition they adduced competent testimony to sustain it, and the State introduced competent testimony to rebut their evidence upon it; but before this feature could possibly be reached, the basis of separating property and expense must be determined. They must establish their basis both as to property and expenses before they get the benefit of their legitimate opinion evidence, as to the extra cost of operation; until they divide the expense, so that to the intrastate expense so divided the extra cost may be applied, they have no sum to which to attribute the extra cost.

Therefore, the railroads are in this position: The revenue theory of dividing the property and expense must be sustained wholly upon opinion evidence before the opinion evidence as to what is the extra cost of doing intrastate freight and passenger traffic is reached, which extra cost must be added to the expense already segregated to the intrastate freight and passenger traffic. Of this revenue theory, Judge Trieber said, in deciding this case, "is clearly wrong," and he quotes from the Tompkins case, 176 U. S. 176, where this Court condemns it. (Yet Judge Trieber, while rejecting it as a whole, uses it for some of the largest items of expense.)

Is this subject matter of opinion evidence like the opinion evidence in the Tompkins case, which can be safely relied upon? No witness claims that his judgment of the revenue theory is based upon experience or observation of its use; for it has not been used until these rate cases arose.

Heretofore a separation between State and intrastate traffic has not been needed and has not been made, and therefore the testimony can not be justified as the result of the witnesses' observation and experience in this line of work. If it belongs to the domain of science, then it is the science of accountancy, and, with the exception of Mr. Nay, they have offered no opinion evidence from any one who qualifies himself as expert in accountancy.

Messrs. Johnson and Kimbell, the able accountants who represented the railroads in statistical matters in this case, did not become

opinion witnesses in favor of the revenue theory, however much they may have agreed to it as evidenced by the compilation of their statistics upon it. Neither Mr. McPherson or Mr. Doddridge qualified themselves as versed in the science of accounting, and in fact their training shows that they are not versed in it. They have always been railroad officials in the operating department.

On the other hand, Messrs. Ludlam, Hillman, Whitehead, Wharton, Hamilton, Willmering and Fitzgerald were all accountants and men who had given special study to these very problems and unqualifiedly condemn the revenue theory for a division of either property or expense and gave their reasons therefor.

In the examination of witnesses for the plaintiffs, and the cross examination of the State's witnesses, it was plainly indicated that the plaintiffs' position was that only experienced railroad officials were competent to testify as to the basis of dividing property and expense, and that it was not a proposition which accountants would be qualified to speak; but this is wholly a question outside of railroad operation; they confuse the experience of operating officials as to knowledge of local and through trains, with knowledge of a proper basis for dividing property and expenses between State and interstate traffic, and none of them have to do with this problem in operating trains, and none claim that they have.

The State contended that a knowledge of the rate situation was necessary to give value to opinion evidence as to the revenue basis, because the rates produce the revenue, and without knowledge of the rates, and the relation of one to the other, the element of cost and of profit entering into each, that the witness would have no qualification to speak of the use of the revenue from the rates without an intimate and accurate knowledge of the rates themselves.

It seems incomprehensible to us that a railroad official like Mr. McPherson, who is experienced in the operating department of railroad work, should pose as an expert on the use of the revenue which was derived from two classes of rates, intrastate and interstate, both of which he was unfamiliar with, and which he repeatedly declined to discuss, owing to his professed lack of knowledge of rates and rate questions.

Mr. Nay's experience was entirely in the auditing department, and he said that he had only such knowledge of rates as would come to him from his work in the auditing department of his road.

Mr. Doddridge did not show any familiarity with the rate situation, and his railroad experience was wholly operating, and he stated that while he was general manager, rate matters were in charge of a traffic manager.

The rate experts introduced by the defendant, Flippin, Perkins and Watson, did not discuss the revenue basis for dividing either property or expenses. They discussed the rates—the subject with which they were familiar.

The rate experts introduced by the State, Bragg, Lincoln and Bee, met the rate experts of the other side upon their own ground and discussed the rates. On cross examination, Mr. Lincoln discussed extra cost and Mr. Bee, from his knowledge of the rate situation, discussed, and condemned, the revenue theory, predicating his condemnation of it entirely upon his knowledge of interstate and intrastate rates and their lack of relation to each other, and the further fact that the cost of the service only incidentally entered into their making.

Therefore, it may be safely stated that the plaintiffs were overwhelmed by the preponderance of the evidence as to the value of the revenue theory, taking the term "preponderance" in its best sense, not of numbers only but of testimony from witnesses best qualified to speak, least interested, and giving the most cogent reasons for their views.

But our position goes farther than this: Had the State introduced no testimony on this subject, we contend that the evidence introduced by the plaintiffs to sustain the revenue theory is not such evidence as is sufficient to overcome the presumption of the validity of the rates made by the State.

In Sturgis v. Clough, 1 Wallace, 269, the Court said: "The charge for demurrage allowed by him (the commissioner) was not justified by the evidence, although there was testimony to support it, such as can always be obtained when friendly experts are called to give opinion."

In "The Conquerer," 166 U. S. 110, the Court said: "The mere opinion of witnesses unfortified by any *data* as to what the earnings would probably have been, is usually regarded as too uncertain and conjectural to form a proper basis for estimation, though in a few cases they seem to have been received."

If, in a civil litigation between private parties, opinion evidence as to profits is too uncertain and conjectural to be the basis of a money judgment, *a fortiori*, opinion evidence as to a theory of division of property and expenses which theory may prove a loss in a given part of a prosperous business, is too uncertain and conjectural to invalidate State legislation regulating that part of the business.

The opinion of this Court upon expert evidence to sustain a theory was written down by Mr. Justice Lamar in Bene v. Jeantet, 129 U. S. 683. That was a suit for infringement of patent. The plaintiffs introduced as a chemical expert one Keith. The defendants introduced one Marchand, who had made practical tests. The case hinged on the testimony of these two witnesses. The Court said:

> "But the testimony of Marchand relates to facts declared to be within his knowledge and experience; whilst that of Keith is largely the assertion of a theory and the presentation of argument showing that the facts testified to by Marchand can not exist."

* * * * * * * * *

"We think the complainants did not make out a case of infringement. There is not a preponderance of evidence in their favor."

The Court of Appeals of the Ninth Circuit said:

"More weight is given to the testimony of a witness based upon facts within his knowledge and experience than to the testimony of a witness which is 'largely the assertion of a theory." Overweight C. Elevator Co. v. I. O. Redmen, 94 Fed. 155.

The only difference between the class of testimony condemned in that case and the one at bar is this: The testimony condemned was largely the assertion of a theory, while the testimony sought to sustain plaintiffs here is wholly the assertion of a theory.

It has, from its intrinsic character, no such weight of itself sufficient to invalidate State legislation, when such legislation is only invalidated by clear and decisive evidence which convinces the Court beyond doubt that under the guise of regulation the State is working confiscation.

THE EXHIBITS ALONE SHOW THAT THE PLAINTIFFS FAIL.

The exhibits give the statistical facts of the case. There are many conflicts in bases and theories to support this method or that method, but the accountants representing the respective sides have been enabled to put in exhibits on each side, the mathematical accuracy of which is not questioned. Some errors, of course, were made, but those were detected and corrected before the case closed. The exhibits of the plaintiffs are numbered from 1 to 60, the exhibits of the defendants are lettered. The exhibits begin at page 2290.

Exhibit "47" (R. p. 2431), filed by the Iron Mountain Railroad Company, shows that four years prior to obtaining the injunction herein that it paid annually a 10 per cent dividend upon its stock, and its stock had increased during that period from (in round numbers) twenty-five millions to forty-four millions and the 10 per cent dividend was paid on all of it. Exhibit "48" (R. p. 2432) shows that in addition to paying this dividend of 10 per cent on its stock, it paid in 1907, $5,692,152.00, and in 1906, $5,455,877.19 in taxes, rentals, interest on bonds and sundry accounts. Mr. F. P. Johnson, accountant for the Iron Mountain, testified that the dividends were paid on the lines in this suit, and no other, as the subsidiary lines were not included either in the suit or in the payment of dividends. (R. p. 362.)

Mr. McPherson testified that from 1901 to 1908 the Iron Mountain spent in Arkansas in improvements to increase the efficiency of train service the sum of $8,684,411.00, principally in reduction of grades.

He also testified that the company during those years purchased 323 locomotives and 6,680 freight cars at a cost of $9,660,372.00 (R. pp. 331, 332).

Mr. Johnson has properly prepared exhibit "47," but, as shown by the report of the Interstate Commerce Commission, the Iron Mountain really earned a dividend of 14 per cent in 1906, but owing to a rule of the Commission that dividends are not credited to stock issued during the year, it made the 10 per cent dividend amount to 14 per cent for that year by not crediting it to the stock represented by the new line constructed. (Report 1906, p. 701.) Batesville is an old town on White River, served for many years by a branch line from the main line at Newport; this line was extended through the Ozark Mountains to Missouri and northwestern connections. The line in Arkansas is known as the White River Branch, and is the most expensive and less profitable part of the line. It runs through a sparsely settled country, very illy developed, and is but a link in a line from the Northwest to the Gulf. On the other side of the State is a low grade line from Helena to McGehee, completed about the same time. The record is full of references to their new lines, and it is apparent that they did not earn any profits, but the whole system earned 10 per cent, and, excluding them, the whole system earned 14 per cent. The next year, 1907, while freshly burdened with these new lines, a 10 per cent dividend is earned and declared.

Exhibit "2" shows that the total mileage of the Iron Mountain Railroad Company was 2,599.15, of which 1,355.09 were in Arkansas. That is, 52 per cent of it is in Arkansas. Statements 3 and 4, exhibit "3," shows the proportions of the various expense accounts divided between Arkansas and the rest of the Iron Mountain railroad, and it will be seen that in the four principal accounts, Arkansas is charged with 54 per cent, 55 per cent, 53 per cent and 53 per cent respectively of the expense of those particular accounts as against the rest of the road.

Exhibit "6" (R. p. 2313), another of the Iron Mountain exhibits, shows these statistics:

Average number of passengers per train mile on the Iron Mountain as a whole	47
On the Iron Mountain in Arkansas	49
Average revenue per passenger per mile on the Iron Mountain as a whole	1.908
On the Iron Mountain in Arkansas	1.903
Average number of tons per train mile, Iron Mountain as a whole	385.58
Iron Mountain in Arkansas	407.41
Average revenue per ton mile Iron Mountain as a whole	7.26
Iron Mountain in Arkansas	7.23
Density of traffic, Iron Mountain as a whole	472,738
Iron Mountain in Arkansas	487,910

Exhibit 6 also shows percentage of expenses to earnings, Iron Mountain as a whole..... 74.24
Iron Mountain in Arkansas..... 73.88

This is explained by Mr. F. P. Johnson (R. pp. 39-52) to mean that for every $100.00 earned $74.24 was expenses, on the whole line, and in Arkansas for every $100.00 earned, the expenses were $73.88. Exhibit "32" (R. p. 2397), filed by Mr. McPherson, covering six months, ending December 31, 1907, shows the percentage of expenses on the Missouri Pacific system, $73.99; Iron Mountain, in Arkansas for that period, $71.19. This table also shows both revenue and expenses per mile, and shows the net revenue per mile on the Missouri Pacific is $951.38, and the net revenue per mile on the Iron Mountain in Arkansas, $1,421.40.

Exhibit "Z" (R. p. 2569), one of the defendants' exhibits, is a comparison of the revenue to expenses per train mile for the years ended June 30, 1897 and 1907, shown by the Interstate Commerce Commission Report for those years. For the year ended June 30, 1907, the operating revenue was $2.17; operating expenses, $1.36 net revenue, 81 cents; for the year ending June 30, 1897, operating revenue, $1.45; operating expenses, 97 cents; net revenue, 48 cents; and the net increase in the ten years, 33 cents per train mile, or an increase of 69 per cent. The same exhibit shows an increase on the St. Louis Southwestern of 163 per cent. It also shows that for the entire United States the net increase was 58 per cent, and in Group 8, in which Arkansas is situated, it was 85 per cent.

Exhibit No. "5" (R. p. 2327) shows the freight revenue per ton per mile interstate, 6.750; intrastate, 13.877 mills; passenger revenue per passenger mile, interstate, 1.865; intrastate, 1.903 mills.

Exhibit "8," as corrected by exhibit "8-A" (R. p. 2390), shows the Iron Mountain in Arkansas for the year ending June 30, 1907, earning a net profit after paying operating expenses, taxes and rentals upon all of its property in Arkansas (at the agreed valuation, double the State assessment) of 9.89 per cent, or, after the correction as shown in exhibit "8-A," of 9.97 per cent, practically 10 per cent return upon its property, as well as 10 per cent dividends upon the stock.

Exhibit "3" shows for six months ending December 31, 1907, it is earning a net return on its property in Arkansas of 7.44 per cent, and after correction in exhibit "3-A" (R. p. 2317-8), a return of 7.50 per cent from all business.

The evidence in this record is full of the effect of the panic of 1907. It is not necessary to have evidence upon it, because that is part of the history of the times of which the Court takes cognizance. It began in October, but its effect on the railroad traffic, particularly the revenue, was felt later. This easily accounted for the reduction of the return upon the property in the last half of 1907, as com-

pared with the fiscal year ended June 30, 1907, to 7.50 per cent instead of 10 per cent.

Exhibit "45" (R. p. 2411) shows the gross earnings of the Iron Mountain since 1900 per mile of road. It shows a larger earning the World's Fair year than any other period, and after those years, 1904, $8,760.00; 1905, $8,391.00; 1906, $9,254.00; 1907, $9,566.00, and the first half of 1908, plainly the result of the panic, the worst half of any six months' operations given in the statement, being $3,619.00.

These statistics prove the Iron Mountain was a prosperous road. It was earning a good return upon its property even when suffering from the panic during a part of 1907, earning 7½ per cent on its investment in Arkansas, and paying 10 per cent dividend on its stock; and for the year ending June 30, 1907, before the panic affected it, making 10 per cent upon its property invested in the State, as well as 10 per cent dividends upon its stock. These statistics further prove that the proportion of the road in Arkansas, 52 per cent in mileage, is bearing about 54 per cent of all the expenses of the road; and yet the ratio of expenses to earnings was less than on the balance of the road, and less than on the entire Missouri Pacific system. Its passenger and freight traffic in Arkansas is denser than on the rest of the road, which probably accounts for the fact that the ratio of expenses to earnings is less in Arkansas than the balance of the system.

Mr. McPherson, Assistant to the General Manager of the Iron Mountain, testified at great length and in much detail as to the falling off in freight revenue from 1897 to 1908 and of the increase in material, labor and taxes. He put in a graphic chart, exhibit No. 30, illustrating his evidence as applied to the Iron Mountain. On the line designated thereon as "Transportation" he explained to mean freight revenue. (R. pp. 739, 380.) It rose in 1897, and fell from 1898 to 1901, remained level 1901-2-3 and rose considerably in 1904 and fell in 1905, 1906 and rose slightly in 1907. In his cross examination his attention was called to the established fact that there had been no material change in the intrastate freight rates in Arkansas since 1900, and, assuming that to be true, he was asked if his descending line of freight revenue did not represent a decrease in interstate revenue, and he reluctantly assented to this. (R. pp. 381-2.) As exhibit "B" (R. p. 2500), heretofore referred to, and the testimony of Mr. Swaim, and of members of the Commission, shows it to be a fact that there was no appreciable reduction in the intrastate freight rates during that period the conclusion is irresistible that if the road was losing money in the last few years, owing to the increased legal burdens and the increased price of material, labor, etc., and if its revenue was decreasing, the loss is in interstate revenue, not intrastate; but the difficulty with his argument is that the road is not losing money, but making money.

Exhibit "Z" (R. p. 2569) shows that notwithstanding this increase in the cost of material, labor, taxes, etc., that the net revenue per mile of road has increased 69 per cent in a ten-year period. Mr. McPherson's chart does not deal with the passenger side of the question; but, as the statistics just quoted show, the intrastate passenger revenue per mile to be more than the interstate revenue, there can be no contention made that the supposed losses could be due to a reduction in intrastate passenger rates. Attention is again called to the fact that the intrastate freight revenue per ton per mile is double that of the interstate freight revenue per ton per mile. Therefore, to make any showing whatsoever on the loss on the intrastate business in this case, it is necessary to show enormous expenses against the intrastate traffic as compared with the interstate. Those expenses on the passenger side must wipe out the increased intrastate revenue in passenger traffic, and on the freight side must wipe out the 100 per cent greater intrastate revenue than interstate, and after wiping out the increased intrastate income, the expense must be so great as to reduce the return upon the property to a level below that which would be compensatory. As shown by these statistics, the expenses in Arkansas as a whole are less in proportion to revenue than the balance of the road. Arkansas is paying more on the expenses than its mileage calls for, and the statistics show the net revenue per mile of road in Arkansas much greater than in the system. Therefore it recurs that the intrastate expenses as against the interstate must be enormous, when such prosperity is shown on the whole business in the State. In face of this it can not be argued for a moment that while the Iron Mountain system as a whole is prosperous, that the Iron Mountain in Arkansas is not, because the statistics prove it to be the most prosperous part of the road. Necessarily the plaintiffs' whole case must rest on proving enormous intrastate expenses in Arkansas, notwithstanding its prosperity and notwithstanding less expense generally in Arkansas than the balance of the line, and notwithstanding more revenue per mile than on the rest of the system. This remarkable proposition is what the plaintiffs must prove in order to make out their case. They made no separation of expenses between State and interstate further than a separation upon the revenue theory; they made no separation of expenses between the local and the through trains, the end to which all of their arguments go to prove ground for the enormous expense of intrastate over interstate traffic. This remarkable proposition is sought to be sustained merely by opinion evidence to the effect that the expenses could and should be divided between the intrastate and interstate traffic in proportion to the revenue received from each respectively, and when so divided mere opinion testimony to the effect that to the intrastate expense thus found there should be added various amounts, ranging from 100 to 800 per cent, for intrastate freight, and 25 to 50 per cent for intrastate passengers. The chief reasons for this additional expense are two: First, the theory that

all intrastate traffic has two terminal expenses in the State and part of the interstate has none, while the remainder has one; second, but principally that the local trains, both freight and passenger, are a great burden upon a road, and they are the vehicles of the intrastate traffic. This is the most expensive train that is run, and the opinion was generally expressed by those witnesses with whom plaintiffs sought to make their case that the local train was a vehicle devoted practically to intrastate traffic, especially the local freight train was a vehicle of intrastate freight, and so much interstate freight as found its way upon it was trifling and negligible in quantity. A brief summary of the evidence upon which the State relies upon these points, much of which was brought out in the cross examination of the plantiffs' witnesses, and supplemented by much testimony on its part is, first, as to the terminal expenses on passenger traffic; on the eastern side of Arkansas is Memphis. It is considered by the railroad companies in this case as situated in Arkansas. It is a city where much of the commerce of Arkansas is transacted. In the extreme western part of the State is the second largest city in it, Fort Smith, which, by the accident of the lines of the Iron Mountain crossing the State line between Van Buren and Fort Smith, makes all of its traffic interstate, and it is so treated by the railroads in their exhibits. Therefore all of the passenger traffic through these two gateways is interstate, and has two terminal expenses charged to Arkansas, and all of the transstate passing through these stations has at least one terminal expense in Arkansas. Little Rock is the largest city in the State. The Iron Mountain lines radiate out of it as the spokes from a hub. It is shown without dispute, particularly in the testimony of Maurice Wright (R. pp. 2265-6), that the great body of interstate passenger traffic, with the exception of a small portion of it, which goes through on through trains, comes into Little Rock and is there transferred to other trains; with the exception of a half a dozen through trains, all of the interstate travel will have a terminal handling at Little Rock, Newport, Texarkana and other junction points, and much, if not most, of the transstate travel will have at least one terminal in the State. This situation is wholly different from that testified to by the learned experts for the plaintiffs, who base their opinion on the general proposition, which is not applicable to Arkansas. Secondly, as to local passenger trains: The St. Louis Southwestern put in exhibit "25," and it shows that all of its passenger trains in Arkansas were local trains. It carried no through trains. All of its interstate as well as its intrastate passenger traffic was carried on these very expensive local trains. The Iron Mountain put in exhibit "46" (R. p. 2412), which shows that it carried eight through trains, and of them one is a fast mail (with scarcely any passengers, as shown in the evidence), and 48 are local trains.

Exhibit No. 3, paragraph A (R. p. 2292), shows on the Iron Mountain 47 per cent of passenger revenue is from intrastate, 32 per

cent from interstate and 21 per cent from miscellaneous. Statement 3 of exhibit "3" (R. p. 2302) shows that there was carried during this period 1,702,490 passengers. It is apparent that these seven through trains carried a small proportion of the interstate passengers. It was in evidence that some intrastate passengers were carried on these trains. It is plain that the local passenger train was not an item of extra expense peculiar to the intrastate passenger traffic as it was necessarily used indiscriminately by both classes of passenger traffic. It was also shown that these through passenger trains were the most expensive trains that the railroad carried, and that they carried less passengers per train than many of the local trains. As these trains were less patronized than many locals, and principally made up of interstate passengers, although not exclusively so, and the local trains carried the great bulk of both classes of traffic, it must be apparent that the interstate passenger traffic is the more expensive, and yet the revenue per passenger mile is 3.48 per cent more for the intrastate. Next, as to local and through freight trains: The local freight train, the "beast of burden," as some of the witnesses aptly called it, is the great and controlling reason usually given for the enormous expense attributed to intrastate traffic. In fact, many of the witnesses seem to regard the local train as synonymous with intrastate freight traffic. Page after page is filled with explanations of the enormous expenses of the local freight compared with the through train. Every witness offered by the plaintiffs, with the exception of Mr. Doddridge, said more or less emphatically that practically all of the load of the local train was intrastate freight, which it peddled out from station to station, and with unanimity referred to whatever interstate freight it carried as negligible in quantity. Principally upon this point they conclude their testimony with the statement that the extra expense of intrastate freight traffic is from 100 to 800 per cent more than interstate, usually about one, two or three hundred per cent more. The St. Louis Southwestern, under the supervision of its assistant auditor, Mr. Kimball, made a test of the performance of the local and through trains for the month of October, 1908. It was done for the purpose of being used in evidence in the Missouri Rate Case and this rate case. Mr. Doddridge, formerly General Manager of each of these railroads, was an expert witness for the railroads in both the Missouri case and this case, and he requested this test to be made for the uses aforesaid. Mr. Kimball testified it was carefully and thoroughly made; the result of this test month is given in statistics shown in exhibits "19" and "20" (R. p. 2375-7). They show that the local freight trains carried 1,084,580 ton miles of intrastate freight, which was 78 per cent of all the intrastate freight carried by that road for that month, and it carried 2,236,361 ton miles of interstate freight, which was 8 per cent of all the interstate freight carried by that road

during that month, but this shows the load on the local trains contained 1,151,781 ton miles more of interstate than of intrastate freight, and 22 per cent of the intrastate freight was carried on the through trains. Exhibit "26" (R. p. 2391) was put in evidence by the Iron Mountain. It shows the transstate, intrastate and interstate freight hauled by it for the month of October, 1907. The Iron Mountain did not work up the performance of the local and through trains as the St. Louis Southwestern did for October, 1908, but the State's accountants took this exhibit and worked up from the records of the Iron Mountain a statement similar to exhibits "19" and "20" of the St. Louis Southwestern. This is exhibit "I" (R. p. 2516), offered by the State. It shows the freight carried by the local trains was composed of 71.49 per cent interstate, and 28.51 intrastate on the Iron Mountain. Only 5.59 per cent of the intrastate freight was carried on the through trains, as against 22 per cent the St. Louis Southwestern, but on both roads, the bulk of the heavy expense of the local train was chargeable to interstate traffic, in the one case 68 per cent, and in the other 72 per cent. At first the accuracy of exhibit "I" was questioned, but that was practically abandoned, although attacks were made upon the system under which it was worked up, which will be considered at length in another connection. We feel that we can safely say that the court will be thoroughly satisfied of its accuracy, and that October was a normal month of the six months' period is established by statistics that are undisputed, although there is quite a conflict between plaintiffs' witnesses as to their opinion of the normality. The State in its plan of separating the expenses, after allowing for extra expense of intrastate traffic on account of two terminals, and all other items which are located in the testimony of the witnesses on each side of the case, divide the expense of each train between intrastate and interstate freight traffic in proportion to the load carried by each of each class of traffic. The passenger train expense is apportioned between passenger, mail and express and passenger between interstate and intrastate. It disposes of the two terminal propositions against itself by charging all of the State traffic with two and the interstate traffic with one, although there is a considerable amount of interstate freight traffic which receives two handlings. All of the traffic in and out of Fort Smith and Memphis receives two terminal handlings, and all of this is interstate traffic. Much of the cotton, grain and lumber traffic, each large interstate movements, receives two and three handlings.

The State adopted the plan of dividing these expenses for the purposes heretofore explained, to demonstrate that the expenses could be divided on practical lines by the use of factors common in railroad accounting and operation, instead of upon an arbitrary basis; and, second, to show that when all of the extra expenses are charged up to the State, after making maximum allowances in every instance where there was a difference of cost, that the intrastate expense was

less per ton per mile than would be compensated by the higher intrastate revenue per ton per mile. The plan of dividing these expenses was supported by many witnesses, who are just as well qualified to speak upon the subject as those who testified against it. They were more in number, and, as we believe we can demonstrate, more of them in position to speak authoritatively upon the subjects testified by them than those offered by the railroads. For these reasons, we think we can confidently assert that the exhibits of the State are supported by a preponderance of the testimony.

Exhibit "O," which shows the results of the application of this plan, gives a percentage of net earnings on the valuation of all the property invested in Arkansas, and shows it made for the six months period 7½ per cent return on all of its property invested in all classes of business, subdivided as follows:

On intrastate freight	10.93
Intrastate passenger	5.21
All intrastate traffic	7.69*
Interstate freight	9.84
Interstate passenger (loss), (red)	3.44
Total interstate business	8.23
Mail business	.04
Express business (loss), (red)	9.61

This loss on express surprised some of the railroad experts.

Exhibit "36" (R. p. 2404) shows the contract under which the express business was carried on the Iron Mountain. Judge Trieber (187 Fed. 351) explains this contract fully. In consideration of the Missouri Pacific Railroad Company, which was the owner of the entire capital stock of the Iron Mountain, giving the Pacific Express Company the exclusive control of the express business on the lines controlled by it, the Missouri Pacific received $3,400,000.00 of the express company's capital stock, or 40 per cent of the entire capital stock. This was paid without any consideration than that it were to have the exclusive express contract on the Missouri Pacific lines. It was further provided that the capital stock should not be increased above $6,000,000.00 without the consent of the railroad company. It is also proved that the Missouri Pacific has received ever since this contract was made an annual dividend of 6 per cent on the stock, amounting to $144,000.00 annually. Judge Trieber gave the Iron Mountain, the Arkansas portion of it, credit for its proportion of the annual dividend for 1907. That contract readily accounts for why the railroad is carrying the express business at a loss, as the loss of the railroad was fully compensated, or more, in the express company's dividends, in which it so generously shared. When the chapter on train mileage division of common expenses between pas-

*The error in Pullman passengers, hereafter explained, reduces this figure to 7.09 per cent.

senger and freight is considered, another, and probably more definite, reason will be seen why the mail and express, as well as intrastate passenger, is unduly burdened.

Exhibit "U," which is an exhibit of the St. Louis Southwestern corresponding with "O" on the Iron Mountain, just given, shows that the St. Louis Southwestern was making a net earning on all its property invested in Arkansas of 12.83 per cent, divided as follows:

Intrastate freight	13.99 per cent
Intrastate passenger	5.79 per cent
Total intrastate	9.16 per cent
Interstate freight	15.00 per cent
Interstate passenger	.66 per cent
Total	14.38 per cent
Mail business (red)	11.85 per cent
Express business	1.28 per cent

The express business here where no deal between the express company and the railroad company is in evidence, widely differs in result from the Iron Mountain, where there is such a deal proved. The State's testimony also shows (R. p. 2065) that the extra cost of intrastate freight over intrastate freight traffic is 86 per cent. As heretofore shown in these statistics, the intrastate freight revenue is 98 and a fraction per cent over the interstate, and so long as the extra intrastate freight expense is less than the extra intrastate revenue, there can be no argument that these rates were confiscatory; because it is undisputed that upon both roads, upon all the business, they were earning a return which is more than compensatory, towit: 7½ per cent in the last six months of 1907, and 10 per cent for the fiscal year ending June 30, 1907, and on the St. Louis Southwestern road is 12.83 per cent.

Another theory closely allied to the theory that the local train carries only intrastate freight is that the interstate freight is largely package freight, L. C. L., and is usually peddled out on local trains. It goes without saying that L. C. L. is the most expensive freight handled, and, when handled on a local train, of course is still more expensive.

The exhibits in this case do not generally separate car load and less than car load freight, but there are two exhibits where they are separated.

In the October, 1907, statement of the Iron Mountain, exhibit "26," the car load and less than car load are separated, and any accountant can work out their percentages, and the same is true of the January, 1909, statement on the St. Louis Southwestern.

Mr. Nay testified that of the total intrastate tons handled, a greater percentage is less than car load than in the case of the intrastate business, and therefore a basis which charged two station expenses to intrastate for one for interstate was unfair.

Then he was given these two exhibits to figure out whether such

was the case, and no one will question the accuracy of a mathematical computation of the Comptroller of the Rock Island System.

He shows that in January, 1909, exhibit "A," prepared by the assistant auditor of the St. Louis Southwestern Railway Company, shows 13 per cent of the interstate tonnage was L. C. L. and 12 per cent of the intrastate tonnage was L. C. L. And on the Iron Mountain a showing, exhibit "26," filed by that road, that 7 per cent of the interstate tonnage was L. C. L. and 6 per cent of the intrastate was L. C. L. (R. p. 2059.)

These exhibits prove:

The Iron Mountain as a whole is a prosperous road, making large annual dividends to its stockholders.

That Arkansas is 52 per cent of the road in mileage and bears 54 per cent of its expenses, and its traffic is denser—both freight and passenger—and is conducted at a less ratio of expense than the rest of the road.

That for the year ending June 30, 1907, it earned on its Arkansas business a return of 9.97 per cent upon its property, and in the last six months of 1907 it earned 7½ per cent on all its property in Arkansas.

(And in this connection attention is called to the statement of Mr. Nay that "the slump" in revenue on his road, due to panic of 1907, began in November. (R. p. 2075.) That the St. Louis Southwestern Railway was earning on all its Arkansas business 12.83 per cent.

That the average revenue per ton mile is almost as much in Arkansas as on the rest of the line—7.23 mills v. 7.26 mills.

That the usual double expense for terminals of interstate versus intrastate traffic in Arkansas, owing to the interstate character of Memphis and Fort Smith traffic and the extra terminals for all cotton, much grain and lumber, and the system of passenger transfers at junction points, is much modified, if not nonexistent. While this is not shown in the exhibits—to which this chapter is directed—these facts are undisputed—although the extent of the modification of the general proposition is disputed; and they should be borne in mind while considering the exhibits.

That the heavy expense of the local freight trains is attributable chiefly to the interstate traffic, 68 per cent on one road and 72 per cent on the other; while 22 per cent of the intrastate freight on one road is carried on the though train and 5 per cent on the other road, thereby further reducing the costs of intrastate freight usually attributed to it as borne wholly on the local freight.

That there is upon one road no through passenger trains and upon the other comparatively few, and the interstate and intrastate passenger traffic is indiscriminately carried on the local trains.

That the freight revenue is 98.18 per cent more per ton per mile for intrastate than interstate on one road and on the other 141 per cent more; and the passenger revenue is also greater on intrastate than interstate traffic.

That there is proportionately more L. C. L. (the most expensive freight handled) interstate than intrastate.

If these roads were not prosperous, these statistics might avail nothing to show that the intrastate traffic was compensatory; but in view of their prosperity and the higher State rates and the nonexistence of most, of not all, the factors which usually render intrastate traffic the more expensive, it is impossible for the condition to exist on these roads in the face of these established facts; that the intrastate traffic is moving under rates so low and expenses so heavy that they are earning these large returns despite the heavy drains of the intrastate, from the interstate traffic. If this be so, then it is time for the Interstate Commerce Commission to look into a system of interstate rates which are so high that they can carry this load and yet earn for the roads respectively 10 and 12 per cent on the business in the State after paying the great losses from the intrastate, through the interstate revenue.

Mr. Nay was confronted with the fact that as a witness for his road before the Interstate Commerce Commission, asking for an advance in rates, he presented the whole expenses without separating the intrastate and charging it with one hundred to eight hundred per cent extra cost and deducting that from the total expenses when he was making estimates asking for an advance in interstate rates.

His road runs through twelve States and he says the intrastate traffic amounts to 20 per cent of the whole, and in Arkansas, Oklahoma, Nebraska, and partially in Minnesota, he had for rate cases on those States worked out a separation, on the revenue basis, of State and interstate traffic, showing an increased expense of intrastate.

He admits that such statements would have had a considerable effect on his statement of expenses which he put before the Commission. It is due to Mr. Nay to say that he gives several pages of explanation of why he did not so make up his statements. (R. pp. 2035-2039.)

The fact remains that if these enormous State expenses are true, they should be presented to the Interstate Commerce Commission, so that it may adjust interstate rates to a lower basis while the courts are enjoining States' commissions from enforcing rates which are confiscatory by reason of these great expenses incident to the traffic in the States.

These statistics, however, would be a potent answer to the contention, if made before the Interstate Commerce Commission, that the interstate rates were too high, as compared with the revenue derived from State rates, if the condition in Arkansas was under investigation.

It is respectfully submitted that the statistics in these exhibits are sufficient alone to end the railroads' case when the rules of evidence heretofore applied in similar cases are applied to this case.

RATE OF RETURN ON THE PROPERTY.

Before proceeding to a discussion of the facts, we desire to call attention to a question of law, or probably one of mixed law and fact which may necessarily arise in the case. That is: What rate of return upon the property is sufficient to save the tariff of rates producing it from being confiscatory?

The Constitution of Arkansas, adopted in 1874 provides: "When no interest is agreed upon, the rate shall be 6 per centum per annum." Article 19, section 13.

In Reagan v. Farmers' Loan & Trust Company, 154 U. S. 362, the Court said:

> "It is unnecessary to decide, and we do not wish to be understood as laying down as an absolute rule, that in every case a failure to produce some profit to those who have invested their money in the building of a road is conclusive that the tariff is unjust and unreasonable. And yet justice demands that every one should receive some compensation for the use of his money or property, if it be possible without prejudice to the rights of others."

In Covington & L. Turnpike Road Co. v. Sanford, 164 U. S. 164, the Court said:

> "If the establishing of new lines of transportation should cause a dimunition in the tolls collected, that is not, in itself, a sufficient reason why the corporation, operating the road, should be allowed to maintain rates that would be unjust to those who must or do use its property. The public can not properly be subjected to unreasonable rates in order simply that stockholders may earn dividends. * * * If a corporation can not maintain such a highway and earn dividends for stockholders, it is a misfortune for it and them, which the Constitution does not require to be remedied by imposing unjust burdens upon the public. So that the right of the public to use the plaintiff's turnpike upon payment of such tolls as, in view of the nature and value of the service rendered by the company are reasonable, is an element in the general inquiry whether the rates established by law are unjust and unreasonable. That inquiry also involves other considerations, such, for instance, as the reasonable cost of maintaining the road in good condition for public use, and the amount that may have been really and necessarily invested in the enterprise. In short, each case must depend upon its special facts; and when a court, without assuming itself to prescribe rates, is required to determine whether the rates prescribed by the Legislature for a corporation controlling a public highway are, as an entirety, so unjust as to destroy the value of its property for all the purposes for which it was acquired, its duty is to take into consideration the interests both of the

public and of the owner of the property, together with all other circumstances that are fairly to be considered in determining whether the Legislature has, under the guise of regulating rates, exceeded its constitutional authority, and practically deprived the owner of the property without due process of law."

In Stanislaus County v. San Joaquin & King's River C. & O. Co., 192 U. S. 201, the Court said:

"It is not confiscation, nor a taking of property without due process of law, nor a denial of the equal protection of the laws, to fix water rates so as to give an income of 6 per cent upon the then value of the property actually used for the purpose of supplying water as provided by law, even though the company had, prior thereto, been allowed to fix rates that would secure to it 1½ per cent a month income upon the capital invested in the undertaking. If not hampered by an unalterable contract, providing that a certain compensation should always be received, we think that a law which reduces the compensation theretofore allowed to 6 per cent upon the present value of the property used for the public is not unconstitutional. There is nothing in the nature of confiscation about it."

In Willcox v. Consolidated Gas Company, 212 U. S. 19, the Court approved the decision of the Court of Appeals of New York on the rate of return upon gas property, which held that rates which would permit a return of 6 per cent would be enough to avoid the charge of confiscation.

In Knoxville Water Co. v. City of Knoxville, 212 U. S., the Court said that the net income shown from the evidence in that case would be substantially 6 per cent, or 4 per cent after the allowance of 2 per cent for depreciation, and that it could not clearly know if the revenue would not exceed that return, and did not feel called upon to determine whether the reduction of the income to that point would or would not amount to confiscation.

In railroad accounting depreciation is annually struck off under rules of the Interstate Commerce Commission, so the question of depreciation is not in these cases.

The rate of return is dependent upon the locality and upon the current rate of interest in the locality in the particular business before the Court. This is fully discussed in Beale & Wyman on Railroad Rate Regulation, sections 394-402. In section 394, the authors say what constitutes a fair rate of return must obviously be determined by circumstances. "The current rate of return for enterprises of a similar character is submitted to be a true basis for fixing the percentage." The authors take this quotation from the opinion of Judge Pardee in L. & N. Ry. Co. v. Brown, 123 Fed. 946:

"I think it will be conceded that since the rates are reasonable and not unjustly discriminatory, the company is entitled to earn some amount; and it seems reasonable and clear to me that if

entitled to earn something under the above conditions, it is entitled to earn under the same conditions a compensatory amount equal at least to the usual and legal rate of interest in the locality in which the railroad is situated."

In section 401, of Beale & Wyman, is the statement of the proposition, sustained by many authorities, that a risky enterprise is entitled to a larger return than a sound investment.

In San Diego Land & T. Co. v. Jasper, 189 U. S. 439, the Court said:

> "If the plant is built, as probably this was, for a larger area than it finds itself able to supply, or apart from that, if it does not as yet, have the customers contemplated, neither justice nor the Constitution require that, say, two-thirds of the contemplated number should pay full return."

This last principle is particularly applicable here. It is in evidence that the Iron Mountain Railroad recently completed two extensions —the White River Branch and the M., L. & H. Branch—each as a short line for their interstate traffic and each through sparsely-settled country, which will require years of development to make either an individually paying proposition, and yet with these encumbrances upon the Arkansas business, the one road was earning on all business in the State, according to its own statistics, 7½ per cent in the last half of the year 1907, and the other road over 12 in the last half of the year 1907, and the Iron Mountain for the fiscal year ending June 30, 1907, instead of making 7½ per cent as it did for the last half of that year, was making 9.97 per cent return upon all its business in Arkansas.

If the return had been much under these figures with the two new and expensively constructed lines, it would not be right to make the customers of the balance of the line pay the full return upon the whole line, including these expensive branches, under the principle decided in the San Diego case. But, passing that question for the moment, and coming back to the main proposition of what return should be allowed upon the whole property:

These tables are instructive, and it seems to us, controlling; they are of the Iron Mountain statistics; it is not necessary to encumber the argument with the statistics concerning the St. L. S. W. Ry. Co. While it has not been a dividend-paying road like the Iron Mountain, yet, its statistics here show its earnings are more than the Iron Mountain. Hence, if we establish that the return on the Iron Mountain is compensatory, it follows without argument that the larger return of the St. L. S. W. Ry. is compensatory.

The first of these tables gives the capital stock, dividends paid and the bond interest paid on the Iron Mountain for each fiscal year from 1899 to 1907, inclusive, as taken from the Interstate Commerce Commission's report of statistics of railroads. The page of the report is given in each instance:

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

Capital stock, dividends paid, bond interest paid, for years indicated. Taken from Interstate Commerce Commission's annual report of statistics of railways.

Year Ended June 30	CAPITAL STOCK		DIVIDENDS PAID			BOND INTEREST PAID		
	Amount	See Interstate Commerce Report, page	Rate	Amount	See Interstate Commerce Report, page	Rate	Amount	See Interstate Commerce Report, page
1899	$25,795,055	661	....	$.....	....	4.80%	$2,311,226	575
1900	25,795,055	641	2%	515,746	559	4.60%	3,082,440	559
1901	25,795,710	643	6%	1,547,243	561	4.57%	3,120,377	561
1902	25,795,710	651	6%	1,547,283	570	4.62%	3,259,409	570
1903	25,795,710	659	10%	2,578,832	574	4.62%	3,462,817	574
1904	25,795,710	659	10%	2,578,832	578	4.51%	4,110,620	578
1905	29,397,374	675	10%	2,578,832	588	4.50%	4,432,575	588
1906	*44,397,374	701	14%	*4,114,588	614	4.49%	4,651,040	614
1907	44,397,374	731	10%	4,438,992	643	4.47%	4,785,797	643

The stock issue increase in 1905 and 1906 aggregates $19,000,000 over 1904. This represents the White River Division and M. H. & L. line construction.

The next table, taken likewise from the Interstate Commerce Commission's annual reports, gives rate of bond interest paid by railroads in Group 8, and by the Iron Mountain Railroad for each fiscal year from 1899 to 1907, inclusive. Group 8 is that large group of States in which Arkansas is situated under the Interstate Commerce Commission's classification.

RATES OF BOND INTEREST PAID BY RAILROADS IN GROUP 8 AND BY THE IRON MOUNTAIN RAILROAD.

Year Ended June 30	RATE OF INTEREST PAID		Taken from Interstate Commerce Report. See page
	Group 8, per cent	Iron Mountain, per cent	
1899	4.29	4.8	575
1900	4.14	4.6	559
1901	4.47	4.57	561
1902	4.03	4.62	570
1903	4.08	4.62	574
1904	4.11	4.51	598
1905	4.16	4.50	588
1906	4.10	4.49	614
1907	4.09	4.47	643

*The railroad company, in exhibit 47, reports the 1906 dividend as 10 per cent, but the Interstate Commerce Commission shows the dividend rate to be 14 per cent, and states that this is calculated on basis of the stock issue *less stock issued during the year.*

It will be seen from the table that for eight years the interest has fluctuated from 4.47 to 4.8 per cent paid upon the bonds of the Iron Mountain road, and it will be noticed that its rate per cent is a trifle higher than that paid by other roads in Group 8, it ranging from 4.03 per cent to 4.47 per cent. Attention is especially called to the fact that there was a small decline in the rate of interest from 1905 on the roads in Group 8, and from 1902 on the Iron Mountain. But the interest has been reasonably stable at about 4¼ per cent for the roads in Group 8, and about 4½ per cent on the Iron Mountain.

One of the best discussions that may be found on the rate of return upon the property is the very exhaustive one in Steenerson v. Great Northern Railway Company, 69 Minn. 353, same case 72 Northwestern Reporter, 713.

> In that case the Court said: "It is not material how the property has been split up into different rights, interests and claims. For the purpose of fixing the rates, the holders of all these stand in the shoes of the sole owner of the property unincumbered."

In Omaha v. Omaha Water Company, 218 U. S. 180, this Court evidently had the same thought in mind when pointing the difference between the value of a plant under an option to purchase, and its value in regard to returns on the property in rate regulation. In speaking of the former value, the Court said:

> "But it did not limit the value to the bare bones of the plant, its physical property as well as its lands, its machinery, its water pipes or settling reservoirs, nor what it would take to reproduce each of its physical features."

Clearly, it must be held that in fixing the rate of return upon the property, when considered as to whether the rate is confiscatory, its physical features—its "bare bones"—are the test; and that seems to have been the view of the court in the Knoxville Water Company case and the Willcox Gas case.

In the Steenerson case, the amount of interest paid upon the bonded indebtedness was a dominant factor in determining what was a reasonable return to save it from the charge of confiscation.

The Court concluded:

> "It is not necessary here to determine just what rate of annual income on the cost of reproducing all of the road except the terminals is the least which the court would uphold before declaring the rates fixed by the Commission confiscatory, but we are of the opinion that in such times as existed in 1894, an income of 5 per cent per annum on such cost is certainly not unreasonably low or confiscatory, and that is as far as it is necessary to go in this case."

Judge Trieber, in deciding this case, held that the earnings should yield 6 per cent return on the property, and in addition thereto, 1½ per cent for a surplus should be made, thus holding that a return of

less than 7½ per cent to be confiscatory. 187 Federal Reporter, pp. 347-349. The learned Judge in that opinion, lays much stress upon the recent decision of the Interstate Commerce Commission in their investigation of the "Advances of Rates" in both Eastern and Western cases. The Commission held that the sum remaining after payment of fixed charges, including as a fixed charge the dividend upon the preferred stock, should be equivalent to between 7 and 8 per cent upon the common stock, or 6 per cent upon the common stock, and carry 1½ per cent as surplus, or 5 per cent on common stock, and carry 2½ per cent to surplus. In other words, an earning of 7½ per cent upon the property.

But the question before the Interstate Commerce Commission was entirely different from the one before this Court. There the roads were seeking an advance of rates and it was the duty of the Commission to allow rates to be made high enough to produce reasonable returns upon the property, and to guard against unprosperous years, providing such rates were not oppressive. That is a very different question from determining whether the rates established by law are subject to the charge of confiscation in not producing sufficient return upon the investment. One is a question of reasonableness of the rates and reasonableness of return compared with rates, and the other a question of confiscation pure and simple.

It would be right and proper for the Interstate Commerce Commission to consider rates to be reasonable which would be far above a limit of confiscation. For instance, if this Court would hold that rates, producing a return only under 6 per cent were confiscatory, and the railroad companies showed the Commission that they could earn 10 per cent upon their investment and not have a system of rates which would be oppressive or be unreasonable in themselves and in line with rates on other roads similarly situated, there could be no valid objection to the Interstate Commerce Commission holding them entitled to rates producing a 10 per cent return upon their property. If the rates were of themselves proper and just to the traffic, it would be reasonable to allow a return upon property far above the line of confiscation.

We can not present a better answer to the ruling of Judge Trieber upon this point than to quote from the decision of Judge Trieber when this case was before him on the motion to dissolve the injunction. 168 Fed. Rep. 720.

After quoting authorities upon the subject, the learned Judge said:

> "Another matter which is entitled to consideration is the fact which has been brought out at this hearing, that the St. Louis, Iron Mountain & Southern Railway Company, and the Chicago, Rock Island & Pacific Railway Company have, within the last few years, and since the establishment of the Commission rates, constructed extensive branch lines through new and unsettled sections of the State; that these lines were constructed at great

expense, owing to the fact that the greater part of these branches run through swampy country, some of it subject to overflows, which necessitated high embankments; that these roads were built principally to serve as feeders for the main line, and at the same time enable these roads to obtain shorter lines for that part of its interstate traffic which merely passed through the State. These are matters which must be taken into consideration in determining what would be proper net earnings on the investments. It would hardly be proper for the courts to say that such roads are entitled to as great a compensation on their investments from intrastate business as the ordinary roads built for the accommodation of the intrastate as well as the interstate business. As is well known, some of the Pacific roads traverse the desert for hundreds of miles through a strip of territory where there is practically no intrastate business, either freight or passenger. Would it be proper, in such cases, to hold that the road should have the right to charge for its intrastate traffic in that section, tariff rates high enough to enable it to earn a certain, fixed percentage on its investment? Would not, in such a case, the rates have to be so high as to be confiscatory of the property of the residents of that State? Must the public guarantee the railroads a certain income on their investment, regardless of the condition of the country traversed, or whether bad judgment was exercised in the selection of the route? We do not think so. New lines or branches to increase the business of the main line, or the exercise of bad judgment in the building of a railroad, are matters to be considered in determining what rates would be fair and just to the corporation as well as the public. That the railroads are entitled to reasonable profits on their investments, and the public to reasonable rates, or, to express it differently, that the rights of the public and railroad companies are reciprocal, is the correct rule of law."

Then follow quotations from decisions of this Court, after which Judge Trieber resumes his opinion, as follows:

"Guided by these principles, the Court is of the opinion that rates which will enable the complainants to earn 6 per cent on their investment, if fairly entitled thereto by prevailing conditions, would be reasonable, especially in view of the fact that a large part of the money used in the construction of these roads was obtained from loans secured by mortgage, and these loans only bear 4 to 5 per cent interest per annum, thus leaving a larger return for the stockholder, who, of course, is unsecured, and in case of insolvency of the company, would be postponed until the mortgage bondholders are paid in full. For these reasons, the risk of the investment of the stockholder being greater than that of the bondholders, he is entitled to a higher rate of interest on his investment. In determining what rates

would be just and reasonable, the court is relieved of passing upon conflicting evidence for the purpose of determining the value of the investment. Complainants, in their bills, only ask for compensatory rates on the values of the roads as determined by the State Board of Railroad Assessors,, for the purpose of taxation. The assessments in this State are conceded to be upon the basis of 50 per cent of the actual value of the property, and they therefore ask to be permitted to earn fair dividends on double the amount their roads are assessed for taxes."

Judge Sanborn, in Minnesota Rate Case (Shepard v. Northern Pac. Ry. Co., 184 Fed. Rep. 765, on pp. 815, 816), held that 7 per cent per annum should be earned on railroad property to save the rates from being confiscatory.

Judge Sanborn says to deprive them of such a return would prevent advances and tend to compel reduction in the wages and salaries of the employees, and it would tend to prevent extensions of their lines. The contrary of these facts are found in the history of the Iron Mountain.

Mr. McPherson's chart, exhibit 30, shows on the Iron Mountain road in Arkansas, that train labor advanced from 100 in 1897 to 137 in 1907-1908, and shop labor advanced from 100 in 1897 to 123 in 1907-1908.

Mr. McPherson testified that during 1907, that there was an increase of wages on the Iron Mountain of 6.7 per cent. (R. p. 288.)

We have heretofore referred to the testimony of Mr. McPherson wherein he showed that for improvements in grade, alignment and other work of improvement, the Iron Mountain had expended from 1901 to 1908, the sum of $8,684,411 in Arkansas (R. p. 331).

The Interstate Commerce Commission reports, from which the foregoing table is compiled, shows increase in capital stock of the Iron Mountain in 1906 to $44,397,374 from $29,397,374, the increase representing the construction of the branch lines referred to, the White River branch and the Memphis, Helena and Louisiana.

Therefore, it is apparent that this road has been meeting with a return on its Arkansas business sufficient to make the development and improvement, and increase materially its wage level, which Judge Sanborn says it should have in order to carry out these beneficent purposes. Whether that return has been 1 per cent or 10 per cent, the desired result has been obtained, and the stockholders have not suffered for they have received with regularity their dividends, and increasing dividends, so that, commencing with 2 per cent in 1900, then 6 per cent in 1901 and 1902, and 10 per cent up to and including our period of inquiry.

Judge Trieber says that in addition to 6 per cent earned when everything is prosperous, an allowance of 1.5 per cent additional for surplus should be made; evidently to carry over lean years. But the Iron Mountain has had no lean years since 1901, when it commenced

paying its stockholders 6 per cent, and then in 1903 commenced paying 10 per cent. If lean years were to come, certainly a surplus should have been set aside from the 10 per cent dividends which were paid for five years before the injunctions were granted in these cases. Judge Trieber refers to the falling off in the dividends in 1908 and 1909 to 5 per cent, and 4 per cent (exhibit 47), respectively, as not being due to the increased net revenue resulting from the granting of the injunction (187 Fed. Rep. 348). What occurred since the granting of the temporary injunction was not in issue, and the issue was of the condition of the road at the time those injunctions were granted. The pleadings and evidence of the plaintiff pointed to the last half of 1907 as the period when the rates were confiscatory. However, it is not far to look for the drop in the dividends; the record is full of the blighting panic of 1907 and 1908. It is for such panics that careful management should save a surplus from overfull dividends and not seek to increase rates whenever a panic arises. They should have good dividends, but the earnings of prosperous years should not all go in dividends so that in lean years, the shippers and passengers must bear the hard times and the carriers be exempt. For instance, suppose instead of paying 10 per cent dividends for the last five years, only 7½ per cent had been paid, and 2½ per cent carried forward as surplus, there would have been on hand when the panic of 1907 and 1908 fell upon the road, the sum of $4,072,569, which spread over the next two years when 4 and 5 per cent were paid, would have more than paid the 7½ per cent for each of those years, and still had a surplus for the next lean years.

But what occurred during this litigation is not the test, still, these facts points forcibly to the argument we are making that these overfull earnings should not have been paid out in dividends without a surplus being held for unprosperous years. Suppose, one year the road makes 20 per cent, and pays it all out in dividends, and the next year makes nothing; can it have an injunction against the rates which produced one year 20 per cent, and the next year nothing?

This, however, wanders from the main thought, but the wandering only follows naturally an analysis of the right to a surplus over a return on the property. That is a question of railway economics. The stockholders of this road preferred overfull dividends in prosperous years, and lean ones during the panic, whereas, reasonable dividends of 7½ per cent could have been paid during the prosperous years and the panic also. Some other road might pay less dividends than 7½ per cent and prefer to fatten the stock; all these questions are beside the main issue; and that is simply if this road has during the period of inquiry, which it selected—the last half of 1907—paid a compensatory rate of interest upon its property invested in Arkansas traffic under the rates permitted by the laws of Arkansas.

It is not a question here of what the stockholders are entitled to

nor the bondholders. It is a question of what the property is entitled to earn, and, as aptly stated by the Minnesota Court for the purpose of fixing the rates, there is but a sole owner, although the property may be split up into various interests; ownership may be in first and second mortgage bonds, preferred stock, common stock, etc., but the law looks not to these liens or claims; it looks to the sole owner of the property, and says he shall have a compensative return upon it.

You have before you the property itself irrespective of its ownership. The prevailing rate of interest in this section of the Union in railroad securities is 4¼ per cent and upon Iron Mountain 4½ per cent. This is the test of the safety of the investment. This is the prevailing rate of interest upon money invested in railroad property in Arkansas. Suppose that there were no bonds upon the road, and the property earned 4½ per cent interest to its stockholders, and that is shown to be the prevailing rate of interest in Arkansas for railroad bond securities; and as the owner without incumbrance on his property would be as secure in his investment as the owner of a bond secured by mortgage on the property, it would necessarily follow that 4½ per cent would save the return from being confiscatory under the authorities heretofore quoted.

The capital stock represents the control of the railroad. A large part of the real ownership is represented in the bonds. When the bondholders are satisfied to accept 4½ per cent on their property invested in railroads in Arkansas, then it seems that the Court should say that if the whole property produces a return of 4½ per cent, it is not confiscatory. This property is so arranged that it pays interest upon a large bonded indebtedness, and also 10 per cent dividends upon the stock, but that is a mere detail of arrangement of the ownership of the property, and is useful evidence here merely to show that the rates are compensatory as a whole.

What this Court has before it is the rate of interest upon the property as an entity, irrespective of what are the interests into which its ownership is split, shall pay, and if it pays a rate of interest that is usual in such enterprises in the section of the country where the enterprise is situated, then it is spared from the charge of confiscation.

Applying such a test to the evidence in this record, we submit that by no possibility can 6 per cent return be held to be confiscatory. It is the legal rate in Arkansas and that is sometimes held to be one of the tests. In the Stanislaus County case it was expressly adjudicated in regard to an enterprise not near so stable as this railroad property that 6 per cent was not confiscatory, and in the Steenerson case, it was expressly stated that 5 per cent was not confiscatory in regard to railroad property, and this Court held 6 per cent not confiscation of gas property.

When the element of safety and stability in the investment is considered, this road presents an exceptionally secure investment. Excepting its recent branches, it is an old road. The main trunks of it are the Cairo & Fulton road, and the Little Rock and Fort Smith road, old "land-grant railroads," whose history are well known.

The road has materially helped to develop Arkansas, and Arkansas in turn has enriched it. Mr. McPherson says it is the best road west of the Mississippi River (R. p. 432). The statistics quoted show its freight and passenger traffic denser than in Group 8, and also show that immense sums have been spent in the last eight years improving the road. Its interest rate is low and its dividends high. The State increased in population as shown by the last Federal Census, 20 per cent, keeping even pace with the balance of the Union. Vast sums have been spent in the two new branches, which are to carry traffic to the Gulf on low-grade lines, and the opening of the Panama Canal will increase their tonnage enormously. There is no record of default in interest, nor in recent years in dividends.

The railroad's exhibits show return in June, 1907, on its Arkansas business of 9.97 per cent, and in December, 1907, after the panic cut into its revenues, of 7.50 per cent on all of its Arkansas business.

While some complaint has been made of new laws, like the three-brakesmen law, electric headlight law, and a few others of kindred nature, yet, they are all in line with modern regulation for safety and better operation, and no law is referred to which injures in the least the safety of the investment. The Courts of Arkansas have been as sound even as this Court in preserving inviolate vested rights and due process of law. From every standpoint, the owners of this property have a safe investment; one not liable to encounter business risks and venturesome chances.

The question before you does not take the broad scope of rate of return presented to the Interstate Commerce Commission, which, as a rate-regulating body, can so regulate rates as to provide for lean years and fat years, and adjust rights of stockholders, common or preferred, and shippers and passengers; that body looks to a stable adjustment of rates for years; this body looks to the narrow question as to whether for the period complained of the rates yielded a return on the property which is sufficient to be treated as regulation, and not confiscation in the guise of regulation.

The owner of the property unencumbered has as safe security—and safer—than the holder of a mortgage upon it. There may be some vice inherent in the mortgage or priorities between mortgagees may arise. The owner encounters no such risks. Under the laws of Arkansas, liens and judgments prevail over mortgages of railroad property just as they prevail over owners. If this property was owned unincumbered, the owner would have all the stability of the investment which a mortgagee enjoys. If investors seek investments in mortgages on this property, and are content with 4½ per

cent interest on their investment, the owner should not be permitted to say that a rate of return equal to the investers' return is confiscatory.

It is earnestly presented for your consideration, that if the rate of return is found equal (and it will be shown to be much more), to the interest rate on the bonds of the road, which rate has long prevailed, that such long continued rate should fix the limit of compensation; and certainly, a rate equal to the legal rate of the State where the property is situated—6 per cent—is free of confiscation.

AN ANALYSIS OF SMYTHE v. AMES, 169 U. S. 466.

Several judges have referred to Smythe v. Ames, 169 U. S. 466, as an authority to support the revenue theory of dividing expenses between State and interstate traffic. It is far from being an authority for it, as an analysas of the opinion will show when read in the light of the testimony and exhibits in the case. We have had the benefit of the printed record in the case, and find in it double paging, one printed in black ink and the other stamped in red ink. Presuming the latter are correct, references are to the stamped red ink numbering of the pages.

There were numerous railroads involved in the case and each road presented separately its exhibits.

Mr. William Randall, ticket auditor of the Burlington & Missouri Railroad, of Nebraska, was introduced by that railroad company.

On page 541 he stated that the earnings of his company were $1,883,036.59 for the year 1902.

Then he was asked what were the operating expenses on its business and he answered that the operating expenses, including taxes, amounted to $972,000 (in round numbers).

He was asked the cost per ton per mile on intrastate business. He said the average cost is the only thing they could get at; that they can not get at the actual cost and that the average cost was 1.091 mills and the earnings on intrastate traffic was 2.039 (see pages 541-4).

On cross examination he said that the amount of earnings given were made up from the waybills.

He testified he did not personally make these calculations.

There is something in that to which Mr. Justice Harlan called attention in his decision.

He was asked how he apportioned the expenses and he stated it was impossible to apportion them and that all you could do was to estimate the apportionment, as it could not be separated, and he had not discovered any better method than to make an approximation of expenses based on experience (pages 558-9).

He was asked how he made his calculations per ton per mile on

Nebraska business and he stated he did it by dividing the cost by the number of tons carried every mile.

In other words, he took the $972,000 and divided that by the number of tons hauled.

At page 568 he was asked on what basis and he replied he found the earnings in Nebraska was 21.27 per cent of all the earnings and he applied this 21.27 per cent to all the expenses.

That is the revenue basis as it appeared in that case, only to disappear.

He reasoned thus: "That if that business consisted of 21.27 per cent of all the earnings, that it was reasonable to tax it 21.27 per cent of the expenses. I could not see any other way of assigning the expense to the business the termini of which was in Nebraska (page 569).

That he did not make an examination to find out mathematically the amount of business done in the State. That he reached his figures of $1,853,036.59 as the whole business done in Nebraska, by taking two months in the year 1892, June and September, being good representative months, and found the whole business for those months and all that business which had its termini in Nebraska amounted to 21.27 per cent of the whole earnings in June and September, and he applied the 21.27 per cent to the whole earnings and arrived at the sum stated by him, as the earnings made on the business with its termini in Nebraska for the year. That he took the waybills as a basis for the freight carried in Nebraska for those two months (pages 569-70). The same percentage, 21.27, was applied to get at the other items of cost as well as taxes (pages 573-74).

He stated it was impossible to make an exact apportionment of cost between passenger and freight, and in his calculation he assigned 70 per cent to freight and 30 per cent to passenger. This was based on experience of railroad men.

In apportioning the cost of operating expenses between freight and passenger business, he did not make an apportionment upon the income of the two classes of business; that the apportionment made by him he did not think was far from the apportionment made on revenue from said classes respectively. He did not use the earnings on the passenger business to obtain the proportion of expenses assigned to that business.

On cross examination Mr. Randall seriously shook the competency of his testimony as to the figures put in by him, as he had no personal knowledge of them; they were prepared by a force of clerks under his direction, but not under his supervision. He was recalled by the railroad companies and asked if he had verified the figures he had put in by personal examination since he had put them into evidence, and he said he had. He was asked to state as to the correctness of the figures he had given when he testified before, and he answered:

"The figures I gave when I testified before are perfectly correct, except on operating expenses; that should be $1,221,742.84 on strictly Nebraska business."

There is no explanation asked as to whether this was a clerical mistake, or whether he changed the basis, or how he arrived at the latter figures. It will be noticed that it is a difference of a quarter of a million dollars.

So far as we have been able to gather from the record in this case, this is the only witness who framed his tables on the revenue basis in that case.

Mr. Andrew S. Van Kuran, auditor for the receivers of the Union Pacific, testified, his testimony beginning at page 617. He gave the freight earnings per ton per mile, estimated that they amounted to about 15 per cent of the total earnings; from that estimate the cost per ton per mile on the local or intrastate business; then gave the freight operating expenses, inclusive of taxes, and the cost per ton per mile, exclusive and inclusive of the taxes, and obtained the ratio of the expenses to the earnings upon all business in the State, making 54.36 per cent without the taxes and 58 per cent including the taxes.

He obtained his revenue figures from the waybills, having the revenue ascertained therefrom under his direction, and he found that the total operating expenses to the total earnings were 58 per cent; that is, of every hundred dollars, $58 were spent for operation. Then he estimated the passenger earnings at 30 per cent; the actual figures given were only of the freight earnings. That railroad men proportioned the freight and passenger business on train mile basis, which gives it 70 per cent to 30 per cent (page 620).

(Mr. Randall said he just estimated his, but the others made a calculation on the train mileage and seem to have reached the same result.)

The Government required his company to make a separate showing of the earnings east of Cheyenne, and from those earnings he deducted a proportionate amount of the mileage represented by the distance from Cheyenne to the Nebraska State line, which was forty-three miles, and the remainder represented the earnings of Nebraska, and upon these bases obtained his earnings per ton per mile. That he (Mr. Van Kuren) was unable to say what proportion of the traffic carried over his road originated and ended within the State. Thus it is seen the Union Pacific, which is the principal road in that litigation, made no effortt o use the "revenue basis" to sustain their contentions and put in no exhibit based thereupon.

In fact, it is seen in the decision of Judge Brewer and the decision of this Court, that the calculations were made upon an entirely different basis, which will be noted later.

When the court came to consider the case, it largely relied upon an exhibit put in evidence by Mr. Dilsworth.

The only reference in either Judge Brewer's opinion or in the

opinion of the Supreme Court, which shows any consideration to Mr. Randall's calculations, is in the latter.

It seems that the counsel for the State based an argument upon this testimony of Mr. Randall; that is, upon the calculations as first made by Mr. Randall, and Justice Harlan called attention to the fact that he corrected his figures of the apportionment of operating expenses from $972,000 to $1,221,000 (speaking in round figures).

When you turn to the exhibits in that case, you will find that the theory upon which the case was really decided:

On exhibit 4 (it is referred to on page 529), you will find that in the first column is given the number of tons hauled locally, and that in the next column shows the average amount received for each ton handled. Those figures were derived from the waybills.

The third column is the total amount received for tons hauled locally and those also were derived from the waybills.

The next is the total amount of reduction caused by H. R. 33.

The next is the amount received from passenger business.

Then follows exhibit 19, which follows the same plan.

The next exhibit, No. 20, likewise following the same plan, except the last column is the percentage of expenses to earnings.

You will see from page 533 this is the percentage of all earnings on all business done on the entire road.

The next table, at page 536, adds 10 per cent to the percentage of all expenses to earnings on all business in the State, and thereby obtains a factor by adding this 10 per cent based on the minimum amount given by Mr. Dilworth, as the extra cost on all intrastate business.

The next table deals with the legislative reductions.

The decision was based upon those tables making up the ratio of cost, and when the ratio of cost was obtained, and then adding the 10 per cent to represent the added cost of State over interstate business, this being the amount admitted by the State's accountant to be the minimum, and the percentage thus obtained represented the ratio of expense to earnings on the intrastate business.

Therefore it is plain that the revenue basis as presented here was not the factor determining this case but the bases of division made up as above stated, on a totally different theory.

Another significant fact found in the record of that case is that the revenue per ton per mile upon which the calculations were based was the same in intrastate as in interstate traffic.

The railroad exhibits show the revenue from State and interstate revenue jointly. They did not get the revenue, apparently, from the State waybills and the interstate waybills, as has been done in this case, but they took the revenue on all business. So that made the ton per mile revenue the same on State as it was on interstate business.

In the trial before Judge Trieber we had the tables analyzed by the accountants, who demonstrated this to be a fact.

When they come to measure the extra cost in that case, they started on a level basis; that the revenue per ton per mile, State and interstate, was the same. We know it is not true here, because we know the revenue per ton per mile on State traffic is almost (98.18 per cent) double that on interstate. So there is 100 per cent difference in the basis to start in, without adding extra cost, whereas, in Smythe v. Ames such was not the case, or if true in fact, was not developed in the evidence, and the statistics were based on uniformity of revenue, intrastate and interstate, per ton per mile.

C., M. & ST. P. RY. CO. v. TOMPKINS, 176 U. S. 167, ON THE REVENUE BASIS.

Whatever construction may have been put on Smythe v. Ames, there can be no misconstruction placed on the opinion by Justice Brewer in the Tompkins case in its unqualified rejection of the revenue basis of dividing property and expenses between State and interstate traffic on the gross earnings or revenue basis.

There is a statement of the finding of fact made by the lower court That is on page 170.

It is shown in paragraph 4 of the finding that the trial court divided the property on the gross earnings basis between State and interstate traffic. The figures on each road are given and the percentage of gross earnings to total earnings, and the trial court made a division of the property upon the gross earnings basis, in order to get a valuation upon which to obtain a return on the property.

This Court, through Mr. Justice Brewer, said:

> "We are of opinion that neither the findings made by the court, nor such facts as are stated in its opinion, are sufficient to warrant a conclusion upon the question whether the rates prescribed by the defendants were unreasonable or not, and we are also of opinion that the process by which the court came to its conclusion is not one which can be relied upon. The Court proceeded upon the theory that a comparison of the actual gross receipts of the company from its South Dakota local business with those which it would have received if the rates prescribed by the defendants had been in force was sufficient to determine the question of the reasonableness of these latter rates, and instituted such comparison with respect to the four years preceding the commencement of this suit. Now, it is obvious that the amount of gross receipts from any business does not of itself determine whether such business is profitable or not. The question of expenses incurred in producing those receipts must be always taken into account, and only by striking the balance between the two can it be determined that the business is profita-

ble. The gross receipts may be large, but if the expenses are larger, surely the business is not profitable. It can not be said that the rates which a Legislature prescribes are reasonable if the railroad company charging only those rates finds the necessary expenses of carrying on its business greater than its receipts.

"In the light of these general and obvious propositions, we proceed to examine the computation and reasoning of the court. For reasons which will be apparent hereafter we do not stop to inquire whether its findings are correct deductions from the testimony, but take them as they are stated. It may be premised that the books of the plaintiff, showing its business for the four years, were examined, and so much as was deemed necessary admitted in evidence. From those books was disclosed with mathematical accuracy the gross receipts of the company on all its business in all the States during each of the four years and the actual cost of doing that business during each of those years; also the gross receipts from the business done in South Dakota, and separately the amount which was received in that State from interstate business and that from local. If the schedule of rates prescribed by the defendants had been in force during the four years, and the same amount of business had been done by the company, the reduction in gross receipts from the passenger business would have been 15 per cent and from the freight business 17 per cent. Of course, the cost of doing the business would be substantially the same. The Court found the value of the plaintiff's property in South Dakota to be $10,000,000, although, according to the testimony, it was bonded for over $19,000.00. It held that it was not fair to consider that sum, $10,000,000, the value of the property employed in doing local business; for it was also used in doing local interstate business; and that the true way to determine the value of the property which could be regarded as employed in local business was by dividing the total value of $10,000,000 in the same proportion that existed between the amount of gross receipts from interstate business and that from local business, each of which amounts was, as we have seen, accurately shown by the testimony. Upon that basis of division it found that the value of the company's property employed in local business was for the first year, $2,200,000; the second year, $2,600,000; the third year, $2,100,000; and the last year, $1,900,000; and also that the gross receipts from local business were for the first year, 18.5 per cent of the valuation; for the second year, 12.7 per cent; for the third year, 15.6 per cent; and for the last year, 16.3 per cent. In other words, for these several years the company received as compensation for doing its local business the per cent named of the real value of the property used in doing that business. Then, proceeding on the supposition that

the defendant's schedule had been in force and the rates reduced as therein prescribed during these four years, it divided the valuation of $10,000,000 on the like proportion of the receipts from interstate business to the receipts from local business as thus diminished, and upon such division found that the valuation of the plaintiff's property engaged in local business would have been for the first year, $1,900,000; for the second year, $2,300,000; for the third year, $1,800,000; and the last year, $1,600,000; and upon such basis that the gross receipts from local business would have amounted to 18 per cent of the value of the property for the first year, 12.1 for the second, 15.3 for the third, and 16.2 for the last. Upon this it held that the difference between the per cent of receipts in the two cases was slight, and that there was no change in what may rightfully be called the earning capacity of the property sufficient to justify a declaration that the reduced rates prescribed were unreasonable. In other words, it was of the opinion that the earning capacity was so slightly reduced that it could not be affirmed that the new rates were unreasonable.

"But that there was some fallacy in this reasoning would seem to be suggested by the fact that, although the defendants' schedule would have reduced the actual receipts 15 per cent on the passenger and 17 per cent on the freight business, the earning capacity for the last year was diminished only 1/10 of 1 per cent. Such a result indicates that there is something wrong in the process by which the conclusion is reached. That there was, can be made apparent by further computations, and in them we will take even numbers as more easy of comprehension. Suppose the total value of the property in South Dakota was $10,000,000, and the total receipts both from interstate and local business were $1,000,000, one-half from each. Then, according to the method pursued by the trial court, the value of the property used in earning local receipts would be $5,000,000, and the per cent of receipts to value would be 10 per cent. The interstate receipts being unchanged, let the local receipts by a proposed schedule be reduced to one-fifth of what they had been, so that instead of receiving $500,000, the company only receives $100,000. The total receipts for interstate and local business being then $600,000, the valuation of $10,000,000, divided between the two, would give to the property engaged in earning interstate receipts in round numbers $8,333,000, and to that engaged in earning local receipts $1,667,000. But if $1,667,000 worth of property earns $100,000 it earns 6 per cent. In other words, although the actual receipts from local business are only one-fifth of what they were, the earning capacity is three-fifths of what it was. And, turning to the other side of the problem, it appears that if the value of the property

engaged in interstate business is to be taken as $8,333,000 and it earned $500,000, its earning capacity was the same as that employed in local business—6 per cent. So that, although the rates for interstate business be undisturbed, the process by which the trial court reached its conclusion discloses the same reduction in the earning capacity of the property employed in interstate business as in that employed in local business, in which the rates are reduced.

"Again, in another way, the error of the Court's computation is manifested. The testimony discloses that the operating expenses of the entire system during each of the four years were over 60 per cent of the gross receipts. If the cost of doing local business in South Dakota was the same as that of doing the total business of the company, then the net earnings of that local business would not exceed 40 per cent of the gross receipts. Reduce the gross receipts 15 per cent—and the reduction by the defendants' rates was 15 per cent on passenger and 17 per cent on freight business—it would leave only 25 per cent of the gross earnings, to be applied to the payment of the interest on bonds and dividends on stock. But the testimony shows that the cost of doing local business is much greater than that of doing through business. If it should be 85 per cent of the gross receipts (and there was testimony tending to show that it was as much if not more), then a reduction of 15 per cent in the gross receipts would leave the property earning nothing more than expenses of operaion. These computations show that the method which the court pursued was erroneous, and that without a finding as to the cost of doing the local business it was impossible to determine whether the reduced rates prescribed by the defendants were unreasonable or not." Chicago, M. & St. P. R. Co. v. Tompkins, 176 U. S. 168.

The revenue theory, which was tried out in the Tompkins case, and thus emphatically rejected is reasserted, not even in disguised form, in this case, when its application is even worse than in the illustrations made by Mr. Justice Brewer.

At the expense of some repetition, as this matter is presented in another connection, yet in this connection we want the attention of the Court to these facts:

The railroad's exhibit No. 5 shows that the State freight revenue per ton per mile was 13.37 mills; and that the interstate freight revenue was 6.75 mills per ton per mile, during the six months under inquiry.

Exhibit 5 also shows that the total State freight revenue was 13 per cent and that the interstate revenue was 87 per cent of all freight revenue. And that the State tons one mile were 7 per cent and the interstate tons one mile were 93 per cent of the total tons one mile.

As the value of the property assigned by the railroads to State

traffic was divided between State and interstate business on the basis of the revenue, this would assign to the State freight business a property valuation of 13 per cent of the property and would assign to the interstate freight business a property valuation of 87 per cent.

That is, the State freight business in volume is 7 per cent of the total and has assigned to it 13 per cent of the property upon which it is required to earn a fair return.

The value of the property devoted to the State use is ascertained by the railroads on this revenue basis; that is, 7 per cent of the ton miles which represent the State use of the common property is not used as a factor to ascertain the State's proportion of the property.

But the revenue derived from the ton miles is used to segregate the State property from the interstate, resulting in charging 7 per cent of the traffic with the use of 13 per cent of the property.

The practical application of the revenue basis for dividing expenses is shown in exhibits here made by Mr. Kimbell, Assistant Auditor of the St. Louis Southwestern Railway Company, of actual conditions more striking than in Judge Brewer's illustrations above quoted.

At the request of the State, Mr. Kimbell put in exhibit "A," giving statistics which he had worked up on his road for January, 1909, showing the transtate, interstate and intrastate freight handled for that month and the amount received per ton per mile for each class of traffic.

It will be remembered that Judge VanDeventer granted the injunction herein against the Commission freight tariff on September 5, 1908, and since that time the Commission has made no freight rates.

The railroads having a free hand put in, in October or November, 1908, both interstate and intrastate tariffs and all the freight in Arkansas until June 7, 1909, when the "Court Tariff" became effective, was hauled upon tariffs of their own making. The statement showed an increase per ton per mile of 9.4 per cent intrastate and 96.1 per cent interstate over the rates existing when its intrastate tariff was enjoined. (R. p. 769, 770). (These are the rates Judge Trieber declared unreasonable on the motion to dissolve the injunction.) Mr. Kimbell was requested to calculate the effect on the actual expenses assigned to the State, on the revenue basis, assuming that these increases had occurred to the revenue in the last six months of 1907. In other words, to take the expenses assigned to State traffic as found in his exhibit for that period, according to the revenue then existing and what they would have been had the revenue increased for that period as it did for January, 1909. (R. p. 771.)

In compliance with that request, he put in exhibit "E."

His exhibit 33 shows intrastate freight revenue for last six months of 1907 on $173,064.45. Had the increase of January, 1909, been in effect on the freight it would have been $339,380.07, and expenses assigned to that traffic of $89,227.26, the percentage being 9.64; according to an application of the increase of January, 1909, applied

to this period the intrastate revenue would have been $339,380.07 and interstate expense $148,796.46, or 16.26 per cent.

In other words, had the revenue, State and interstate, been increased for the six months' period as it was actually increased during January, 1909, for moving exactly the same commodities on exactly the same expenses, the greater increase of State rates would have increased the expenses assigned to the State from $89,000 to $148,000, without a single actual increase of one dollar of expense. Surely, as Justice Brewer says, "such a result indicates that there is something wrong in the process by which the conclusion is reached."

THE EVIDENCE ON THE REVENUE THEORY.

Explanation and Application of the Revenue Theory.

The railroads predicate their case on the revenue theory of dividing property and expenses between State and interstate, and it will be useful at the threshold of the case to understand exactly what the railroads consider the revenue theory to be. In a question to Mr. McPherson, Assistant to the General Manager of the Iron Mountain Railroad, one of the chief witnesses for the railroads, by the counsel for the railroads, it was thus stated: "In compiling exhibit 3, I understand that the auditing department ascertained all the expenses chargeable to the State of Arkansas, for both intrastate and interstate and miscellaneous traffic, on the basis of actual expenditures, as far as possible, and then assigned to the intrastate traffic a portion of the total expenses of the State of Arkansas, based upon the percentage of the intrastate revenue to the total revenue." (R. p. 304.) To state the proposition concretely, the revenues of a railroad are ascertainable quanities. The books of the railroad company show the sources from which every cent is received, interstate, intrastate and miscellaneous; every cent paid to a railroad for shipping freight or for passenger fare, or for express, or from mail contracts, or from rents, or whatsoever other source of revenue, is definitely located. In this case they have been located accurately for the period of the inquiry, which was the last six months of the year 1907. The railroad selected that period to present in detail their revenues and expenses, and the accountants for the State have carefully gone over their calculations, and wherever errors were discovered they have pointed out, and the final exhibits have their approval, as substantially accurate as to the actual revenues received by the railroads during the period of inquiry. Likewise the expenses incurred in the State of Arkansas have been accurately ascertained. The division of them between freight and passenger is the subject of another chapter. There is no controversy in this case over the value of the railroad property. That was settled by a stipulation, which reads as follows:

"It is agreed by counsel for defendant in this case that the assessments introduced in evidence at the hearing of the applications for injunctions in these cases before Judge VanDeventer, and which are set out in the exhibits filed by the accounting officials of the respective complainants, in the evidence taken before the Master in these cases, were made upon the basis of 50 per cent of the value of the property; and that said assessments, multiplied by two, respectively, represent the value of the property for the purposes of this case." (R. p. 653.) There is some difference of opinion among the accountants and the witnesses on the opposite sides of the case as to the proper crediting of revenue received. There is a wide difference as to the proper distribution of expenses between State and interstate, and a wide difference as to a division of the property between State and interstate, but the actual revenues and the sources from which the same were received, the actual expenditures and the actual value of the property, are not matters of controversy. Primarily, the court must find a method of dividing the property between State, interstate and miscellaneous traffic and between freight and passenger. There is controversy in this case as to some part of the property, and as to whether certain expenses charged here to the State of Arkansas should be charged. For instance, the Iron Mountain Railroad rents from the St. Louis Southwestern Railroad the use of its tracks from Paragould, Arkansas, to the Thebes Bridge, on the Mississippi River. Thirty-six miles of that track is in Arkansas. For its use the Iron Mountain Railroad pays in round figures about $35,000 a year, and bears its proportion of the maintenance-of-way on a car-mile basis. This track is used exclusively for interstate freight traffic. The Iron Mountain has agreed in its contract of lease that it will not run passenger trains, or stop its freight trains, for any local business on this line. There is some controversy, or rather difference of opinion, among the witnesses as to the purpose of this contract, Mr. McPherson contending that it serves the purpose of a double track to relieve the congestion of traffic of the main line from St. Louis south, but he admits in his testimony, and that fact is well brought out by other witnesses, that one of the purposes was to carry the interstate freight on a low-grade line, instead of hauling it over the high grades in and about DeSoto, Missouri, a point between St. Louis and the Arkansas line, on the main line. Be the purpose what it may, it is an established and admitted fact that this track, at an expense of $35,000, is used exclusively for interstate freight; yet, in the statistics of the case relied upon by the railroad, that $35,000 is charged as an expense to Arkansas, and is divided between all business of the State as if it were an expense existing generally; in other words, the intrastate freight and passenger traffic and the mail and express traffic are charged with the same proportion of this as they are with any other expense incurred in the opera-

Agreed Valuation of the Property.

tion of the road in Arkansas. Memphis, situated on the east bank of the Mississippi River, immediately opposite the State of Arkansas, is entered by the Iron Mountain road, there being about a mile and a half of trackage in Tennessee, and expensive terminals in the city of Memphis. All the expenses of Memphis, including the salary of attorneys attending to the Tennessee business of the road, are charged to Arkansas, and this expense divided between the various classes of traffic, just exactly like the terminal expenses of Little Rock and the expenses of the legal department of the State of Arkansas are divided between the various classes of traffic. On the western side of the State is the city of Fort Smith, situate on the Oklahoma border. There are expensive terminals in Fort Smith, and these terminals serve both Arkansas and Oklahoma, but all the expense of Fort Smith is charged to Arkansas except the legal department located there, which is divided between Arkansas and Oklahoma, on a mileage basis. These matters are mentioned in this connection, not to present them in argument at this time, but to explain that while the expenses are ascertainable quantities and there is no controversy over them, or over the value of the property in this case, yet there are controversies over the division of the property; what property is properly chargeable to the State; over the apportionment of the expenses; and, as to many items of expense—whether they are proper charges at all.

The least matter of difficulty is to ascertain the revenues of the railroad, and to divide them between intrastate and interstate traffic. While this traffic is commingled and handled interchangeably, yet it is indellibly impressed with its true character from the time the railroads assume it. The instant it receives a shipment of freight its origin and destination are known, and its character as State or interstate fixed, and the same is true of a passenger; he is either an intrastate or an interstate passenger from the moment the relation begins. Most of the passenger trains carry mail and express. Some of this has origin and destination within the State. Some of it is transstate, passing through the State without having its origin or destination within the State, while other has origin and destination in this State, and other origin or destination in another State. But all of this traffic passes upon the tracks alike, is handled upon the tracks alike, and there is no change in the handling on account of passing the State line. After obtaining the revenue derived from all sources in the State of Arkansas, the railroads proceed to divide the property and the expense on this revenue basis, and to do this, they take the percentage which the revenue of each class, divided between interstate passenger, intrastate passenger, interstate freight, intrastate freight and miscellaneous freight and miscellaneous passenger, bears to the whole as the factor to find the property devoted to, and expense incurred by, each of said respective classes of traffic. This puts concretely an example of their methods, disregarding, for simplicity, the freight and passenger subdivisions. Suppose the revenue from a railroad to be

one million dollars from all sources. Of this, one hundred thousand was for mail, express and other miscellaneous traffic; $200,000 was from intrastate freight and passenger traffic, and $700,000 from interstate freight and passenger traffic; the proportion of intrastate revenue would be 20 per cent, miscellaneous 10 per cent, interstate 70 per cent. Suppose the expense of conducting the whole traffic for the year would amount to $500,000; then, under the revenue basis of dividing the expenses, 20 per cent of that expense would be assigned to intrastate, 70 per cent to the interstate and 10 per cent to the miscellaneous. Suppose the property of the railroad was valued at $40,000,000, the amount assigned to intrastate traffic would be 20 per cent, or $8,000,000; to the miscellaneous 10 per cent, or $4,000,000, and to the interstate 70 per cent, or $28,000,000. This is the application of the revenue theory before reaching the extra cost of the intrastate traffic, which will be presented at some length hereafter, which is, briefly stated: Various railroad operating officials testified that it cost from 100 to 800 per cent more, varying in accordance with the opinions of the different officials, as to the increased per cent to operate intrastate freight over interstate freight traffic. Then, after the expenses are divided, as above outlined, and the proper per cent assigned to intrastate freight business, 100 per cent is added then to that sum, or 200, or 600, or 800, according to the theory adopted as to the amount that it will cost. Similarly as to the intrastate passenger, the increased cost varying from 25 per cent to 50 per cent

Mr. R. E. Kimbell, Assistant Auditor of the St. Louis Southwestern Railway Company, an accomplished accountant and a representative of his company in this case in the preparation of statistics, was asked the effect of an increase of State rates without a corresponding increase of interstate rates on the expense assigned to the State under the revenue theory. He answered correctly the effect, and at the request of counsel for the State, worked out the following example, which is exhibit No. 23: Assuming the entire revenue from freight in the State is $100,000 and the entire freight expense of the State $70,000, interstate freight revenue $85,000, intrastate freight revenue $15,000; then calculate the amount of expense chargeable to State business, and the amount of expense chargeable to interstate business, and then assume intrastate rates are increased 33⅓ per cent. Then make the same calculation of what amount is chargeable to State business and what to interstate, assuming the $70,000 expense account would remain stationary, and that the interstate rates would remain stationary; also make a calculation under the rule followed in granting the preliminary injunction in this case—assume 100 per cent more cost for State freight operation than interstate freight operation:

ANSWER TO JUDGE HILL'S EXAMPLE.

Item.	Per Cent.	Amount on Straight Rev. Basis.	Amount Under Judge VanDeventer's Theory of 100 Per Cent Extra Cost for State Business.
State freight revenue.....	15	$15,000.00	
Interstate freight revenue..	85	85,000.00	
	100	$100,000.00	
State freight expenses.....	15	$10,500.00	$18,200.00— 26%
Interstate freight expenses.	85	59,500.00	51,800.00— 74%
	100	$70,000.00	$70,000.00—100%

STATE FREIGHT REVENUE INCREASED 33⅓ PER CENT WITH NO CORRESPONDING INCREASE IN INTERSTATE REVENUE.

State freight revenue.....	19	$20,000.00	
Interstate freight revenue..	81	85,000.00	
	100	$105,000.00	
State freight expenses.....	19	$13,300.00	$22,400.00— 32%
Interstate freight expenses.	81	56,700.00	47,600.00— 68%
	100	$70,000.00	$70,000.00—100%

FORMULA FOR ADDING 100 PER CENT EXTRA COST.

15% × 2 = 30 =	26	Difference	11% +
85%	85 =	74	"	11% =
100%	115	100		
19% × 2 = 38 =	32%	Difference	13% +
81%	81 =	68	"	13% =
100%	119	100%		

Exhibit 23.

To explain this problem without following it in detail, it is this: On the assumed hypothesis the expense assignable to the State freight business would be $10,500.00; if the State rates were increased 33⅓ per cent and the interstate rates were not increased, the division of the same expense would assign to the State of Arkansas $13,300, or an increase of $2,800, without any real increase whatsoever, but an increase due solely to the methods adopted for dividing this expense, which would be an unreal expense against the State of $2,800, merely

because the State rates were increased 33⅓ per cent. Assuming the correctness of 100 per cent extra cost for State business over interstate, instead of $10,500 there would be assigned to the State business $18,200, and when the rates were increased 33⅓ per cent then the 100 per cent extra cost for State business would assign to the State $22,400.00, an increase of $4,200, as against an increase of $2,800 merely due to the methods adopted; and, in fact, there being no increase of State expenses whatsoever.

Mr. Frank Nay, Comptroller of the Rock Island System, another accomplished accountant and the chief witness for the railroads upon all accounting subjects, in his carefully-prepared essay on the revenue basis, which he read, contended that a similar calculation to the one which Mr. Kimbell prepared, at the request of the State's counsel, refuted an argument which he heard advanced against the revenue basis, that it was like traveling in a circle, and that when the revenue of intrastate traffic is doubled, the operating expenses also doubled and the end was just the same as in the beginning. And then he made his calculation to demonstrate that it did not thus work. His calculation using differently-assumed totals was exactly the same as Mr. Kimbell's. It will be found on pages 634, 635. On cross examination, his attention was called to Mr. Kimbell's exhibit No. 23, and he said that it is the same as his illustration and that was worked out correctly. (R. p. 655.)

While somewhat a digression, yet it may assist the court to call attention to actual conditions shown to have existed in this case which made this example of the operation of the revenue theory a practical one and not a mere theoretical one, as is contended by the witnesses for the railroads. They say that such a condition as assumed in exhibit 23, an increase in State rates without a corresponding increase in interstate, is impractical and not consistent with railroad practice. After the temporary injunctions were granted in this case by Judge VanDeventer, the railroads who secured the injunctions put in voluntary intrastate freight tariffs. These tariffs went into effect November 2, 1908. In February, 1909, the State filed a motion in the Federal Court to dissolve or modify the injunctions on the ground that the railroads had taken advantage of the injunctions to inflict unreasonable and discriminatory rates on the people of Arkansas. This came to a decision in April, 1909. The Circuit Court held that the rates were unreasonable and at least 50 per cent higher than the Standard Distance Freight Tariff, which had been the tariff in force for the past eight years for all intrastate freight traffic. In the testimony of Mr. Flippen, the General Traffic Manager of the Iron Mountain, he said that the increase of interstate rates was 10 to 15 per cent when the State rates were increased. (R. p. 263.) Mr. Perkins, the General Freight Agent of the Iron Mountain, testified they were increased 10 per cent. There is an exhibit to the testimony of Mr. Kimbell, when he produced as a wit-

ness for the State, in which was shown that in January, 1909, the month during which the railroads made both the intrastate and interstate rates, that the interstate revenue of his road, the St. Louis Southwestern, increased 9 per cent, and the intrastate revenue was increased 96 per cent per ton per mile (R. pp. 769, 770) set forth in exhibit "A.") Subsequently, Mr. Kimbell, after a careful examination, testified that the increase of 96 per cent of the State revenue was not due wholly to the increase of State rates, but was due in a large measure to the shifting of commodities, and that the actual increase of rates was 48 per cent. There was no showing by him, although it was requested, of whether the 9 per cent interstate increase was entirely due to the increase of rates, or was likewise due to both increase of rates and shifting of commodities. Mr. Perkins, one of the witnesses for the Iron Mountain on rate matters, testified that there was no shifting of commodities as between State and interstate business in January, 1909. (R. p. 1632.)

Thus it is seen in actual practice that if at any time following November 2, 1908, and before the railroad rates were annulled by order of Judge Trieber, the State and interstate expense had been separated under the revenue theory, there would have been a tremendous increase of the State expenses by reason of the great increase of the intrastate rates and revenues over the interstate rates and revenues without in fact a single dollar of actual increase. Surely such a basis can not be a sound one.

The discussion of the revenue theory calls for its division into its component parts. The theoretical side of it is the opinion evidence of gentlemen learned upon the subject as to its being a proper factor for this purpose. This is opposed by the opinion evidence of men learned upon the subject, who contend that is not a proper factor. Opinion evidence is weighed from the standing of the men, their experience, their observation, their learning upon the given subjects, their character, and the cogency of their reasoning. We will divide this discussion into three parts: (1) The theoretical side of it; (2) the relation of the rates to the cost of service; (3) the relation of the intrastate and interstate rates to each other. In addition to having these matters discussed by men learned in the subject, the State has gone further and exhibited the rates under which the great body of interstate traffic moved, and has, we think, demonstrated that the rates bear no relation to the cost of service, and that there is no cost relation between State and interstate rates; and, in fact, no relation between any given set of rates, either State or interstate. The subjects will be presented separately and in order.

(1) THEORETICAL SIDE OF THE REVENUE BASIS.

On the theoretical side of the case the railroads presented Mr. C. J. McPherson, Assistant to the General Manager of the Missouri Pacific

Plaintiffs' Evidence.

and Iron Mountain System. Mr. McPherson has had thirty-two years' experience in railroad service ranging from telegraph operator, station agent, general yardmaster, master of transportation, chief clerk to the general manager and assistant to the general manager.

The next witness is Mr. W. B. Doddridge, who has had a very extensive railway experience and was general manager of the Missouri Pacific System from 1893 to 1900, since which time he has not been an official of any railway. He was also at some time the general manager of the Cotton Belt road.

The next and only other witness on this subject was Mr. Frank Nay, Comptroller of the Chicago, Rock Island & Pacific Railway. Mr. Nay's work in railway service has been entirely in the accounting department. An analysis of the testimony of those witnesses is necessary in order to get a correct understanding of the revenue basis as presented by the railroads themselves.

It will be interesting to note in the testimony of these three gentlemen upon this subject practically nothing is said in support of the division of property between State and interstate business on the revenue basis.

Probably one of them made a general statement that it was the proper basis for both property and expenses; but with the exception of some general remark of that kind, there is absolutely nothing developed in this record to sustain the revenue theory as a basis of division of property in the State between State and interstate traffic. They make arguments in favor of dividing the expenses between State and interstate, and go into it exhaustively. They present fully their views upon that phase of the question. But upon the other phase of the question, and an absolutely necessary one, they are silent.

Mr. McPherson's testimony on this subject begins at page —. (R. p. 304.) He first takes up what is called the "units of measure," which run through railroad operation. He discusses "train mileage," "car miles," "number of tons," "number of passengers," "ton miles," "passenger miles." He discusses learnedly and fully the use of these measures and applicability of each to some given conditions and argues that none of them can be used to divide expenses between State and interstate business. In explanation of the various uses of these different units that are in vogue among the railroads for the purposes of measuring different quantities, he throws a good deal of light upon when and where each measure should be used, in his argument against using any one of them to divide expenses between State and interstate traffic. As none of these various measures that he speaks of is used by the State in this case to divide generally interstate and intrastate traffic, his argument against their use for that purpose, was largely wasted.

The State's accountants have in exhibits prepared by them, used these measures in their appropriate places to measure such matters

as should be measured by the unit applicable to that particular matter and used them much as Mr. McPherson and other railroad officials have testified they should be used. In fact, a large part of the authority for the use of each measure which is used by the State's accountants is found in the explanation of the use of this particular measure in the testimony of Mr. McPherson, Mr. Doddridge, Mr. Rawn and other experts called by the railroads. As the court will see in reading the cross examination of these experts put forth by the railroad, the State attempted, when it found one of these witnesses qualified to speak on a given subject, to find the proper basis for each item of expense, so that when the proper basis was found, it might be used by the State in the various exhibits in which it sought to use the proper basis for dividing each item of expense.

That, however, is a digression from Mr. McPherson's argument.

After making his dissertation against the use of any of these methods, particularly the "ton mile" method of dividing expenses, Mr. McPherson finally comes down to his reasons for adopting the "revenue basis." This is given at page 320. In answer to the question, what is the best basis upon which to divide the expenses of operation, as between intrastate and interstate traffic, he says that the natural basis for dividing the cost of intrastate and interstate business respectively, would, in his opinion, be the proportionate revenue derived from each. This he designates as the "revenue basis." Then he adds: "To this basis as a fundamental one should be added such additional cost as may attach to the handling of intrastate business over that of the interstate." The proposition amounts to this: The best basis for dividing the cost between State and interstate business is the proportionate revenue derived from each and yet to that result should be added additional cost which may attach to the handling of intrastate business over that of interstate. Mr. Nay puts the same proposition in this way (page 635): "After making basic approximation of the operating expenses for intrastate freight or passenger traffic, the figures thus arrived at may be increased in the proper proportion to represent the excess of the cost of transporting intrastate traffic, over the cost of transporting interstate traffic."

It is interesting to note that Mr. McPherson in the beginning of his testimony adds the extra cost to his basis and then argues why the revenue, and by that is meant the straight revenue without the extra cost, is the proper measure of expenses, while on the other hand Mr. Nay makes his argument for the revenue being the proper basis of expense and closes his essay on the subject with the proposition that to the factor obtained on the revenue basis must be added certain extra sums for handling intrastate traffic. Attention is called to it here merely to show the lack of logic of the revenue basis when to it must be added something to make it worth anything—this hypothetical extra cost of intrastate traffic.

That is the revenue basis as developed by these gentlemen. They spent page after page in arguing and in presenting their views to sustain the proposition that the rates represent the cost of the service and that there is a relation between the State and interstate rates. They say that the value of the revenue theory is based upon the cost of the service being a fundamental proposition in the rate and the relation always existing between State and interstate traffic, yet they say after you find that, to give this any value whatsoever you have got to add something to it based upon the opinion of some of the railroad officials, in order to give it any value whatsoever.

That is the revenue basis as presented by them.

After explaining that the revenues are derived from different sources, such as freight, passengers, miscellaneous, rentals, etc., and that a division of these earning can be actually ascertained, then he adds: "Naturally, they reflect the value to the railway of each class of the service it performs." In the next paragraph he makes this statement:

> "Moreover, the revenue basis is reflective of the efforts of the traffic men who make the rates, to consider in a measure the value and character of commodities, and the risk and distance attached to their transportation. This is apparent in the classification of commodities into classes and the different rates established for their carriage."

Then he instances the fact the rate on first-class is higher than on second-class, etc., and that such differentiation in the commodities and rates is recognized by the railways and by all rate-making bodies. He says:

> "The revenue expresses value, character, risk and distance, rather than quantity, and likewise considers to no little extent the question of cost, as it is obvious that it costs more to transport some commodities in small quantities, than it does other commodities in larger quantities."

Then he makes another argument against the ton mile theory and concludes by saying that the revenue basis is a proper basis on which to apportion the cost of operation, as between interstate and intrastate traffic.

Next he takes up the extra cost proposition, which will be considered separately.

At page 401 Mr. McPherson was cross examined upon the revenue basis. He was asked if the revenue basis didn't reduce the price for hauling a commodity to a common level and said that it did not. That the various rates, first, second and third, and other class and commodity rates have considered the differences in character, volume, risk, bulk and as a result of the work, not as a measure of it. The revenue is the result. Then he was asked, does it bear the proper relation to the work done. He answers:

"I never have said that I thought the revenue basis was an exact basis to use, but I believe it has less objections than any other basis, and there are more reasons why it is logical, than any other basis that has been suggested. And it expresses a result of the things that have been done, after they are done."

It was insisted that this was not in answer to the above question, as to whether the revenue bears a proper relation to the work done and he further answered that question as follows:

"I do not know that it bears an exact relation to the work done. That is doubtful. But it probably comes nearer doing so, considering all of the elements, than the other basis. It, of course, does not deal with quantity. It deals with what has been paid for the quantity transported; and that has considered, undoubtedly, the elements of character, bulk, risk and distance."

He was again asked, does it bear proper relation to the cost of transportation, and he says that it comes nearer the proper relation with the cost than any quantity consideration. Then he was asked if it wasn't a fact that rates were largely based upon competitive conditions and not upon the cost of the service. He said that he was not a rate man, but from his general knowledge he knew competition must be considered in rate-making between localities, as well as between railroad companies. He denied that it would necessarily or naturally follow that when rates were made on competitive conditions, that they would not reflect the cost of the service. He takes refuge in the statement that the revenue basis is not perfect, but it possesses less objections than others, and tries to switch off the argument to the ton mile theory. When held down to the question, he says that it is a subject that he does not feel like discussing, as he is not a rate man (page 402).

Mr. McPherson has been put forward as one of the chief witnesses for the railroads, to support the revenue basis.

But Mr. McPherson's experience has been in the operating department. Whenever Mr. McPherson was questioned about rates he declined to answer and stated, as he stated here at pages 402, 403, and again at page 436, that he did not know anything about rates and that these questions that had been discussed by rate-making bodies, and that he did not feel competent to discuss them.

What of the competency of this witness to sustain the revenue theory, when the revenue theory is dependent entirely upon the rate representing the cost of the service, and upon the further proposition that there must be a relation of cost between the State and interstate rates to give it any value?

To proceed with Mr. McPherson's testimony: He was questioned about the cost of handling lumber from Arkansas to its market, St. Louis and other places, where it is handled on a blanket rate and the cost of the service widely differing, but the revenue identical. He admits that there would be a difference in the cost of the service that

would not be reflected in the rates in an instance like this, and admits that the revenue basis is not an exact one. He finally admits (page 403) that distance does not control altogether in rate-making and admits that distance would be ignored in the instances given in order to give two localities an equal chance at the market.

Then he was questioned about shipments of merchandise from St. Louis and other Eastern trade centers to Texas, where shipments are made to various points in varying distance from the common market, like St. Louis, which take the same rate. An illustration of this is given at pages 404 and 405. He admits that on three cars passing through Arkansas from Texas to Texarkana, where the service would be identical, the actual expense identical, the Iron Mountain would receive for one $20.58, for another $14.77 and for another $19.31.

In getting the division of revenue on interstate business where there is a haul in two States, the railroads take the *pro rata* hauled in each State. For instance, if the haul was 100 miles long, fifty miles in Arkansas and fifty miles in Missouri half of the revenue of that haul would be credited to the Arkansas interstate business, notwithstanding the rates in Missouri and Arkansas would be quite different. An illustration of the way that this would work out is given at pages 407 and 408, which shows the inequality of using this revenue as a means of dividing the expense with the intrastate traffic, as there will be a different apportionment for exactly the same service in Missouri, Arkansas and Texas, owing to the difference in the State rate in each of those States. The answer to this question, after several days' consideration, is found at page 426, in which the correctness of the hypothesis is admitted, but it is claimed that such shipments as illustrated therein were obsolete.

But that was no answer to the proposition. An illustration was given of a movement from Carondelet, and so on. But the fact remains that as to some traffic—it may not be a very large volume of traffic—but as to some traffic that would move through those three States, if there were rate suits pending in each of them, there would be a different apportionment of the expense of that traffic in each State, because the State rate in each State is different, while the interstate rate was cut by the State line as a measure of the other.

Mr. McPherson was asked if it was not true that an increase of the State rates made the apportionment of cost to the interstate traffic proportionately higher, and he said that while there was no increase of cost of operation, yet if the revenue proportion of the State as against the interstate was increased, that there would be a proportional increase in the proportion of expense charged to the State.

He admits that an increase in the State rate, without a relative increase in the interstate rate, would increase the expense apportioned

to the State, without any actual increase in the expense under the revenue theory of dividing State and interstate expenses.

He admitted that the interstate passenger and freight rates were not immediately increased when the rates were increased in Arkansas after Judge VanDeventer granted the injunction, and that, therefore, during the period in which there was no increase in interstate rates, application of the revenue basis would have apportioned greater expenses to Arkansas than would have been apportioned prior to these increases, without any actual increase of the expenses. (R. pp. 409-411.)

To Mr. McPherson was quoted the testimony of Mr. Flippen, who stated that there had been an inordinately low interstate rate from Memphis to Arkansas points, and he was asked, assuming this to be true, if under the revenue theory this would not make the apportionment of the expenses charged to Arkansas greater than should be in proportion as the Memphis interstate rates were inordinately low. After a good deal of fencing he says that he does not understand that it would have any effect on the revenue basis of apportioning the expense, and was asked why it would not, and answered as follows:

> "As a probably exact relation does not exist between intrastate and interstate rates in every instance, and it would be difficult to say just what the exact relation should be. There is undoubtedly a relation, but it would be hard to define just what it is.
>
> "The prevailing condition for a short time may have disturbed the relation; that would not be illustrative of or affect the general revenue basis proposition; it would merely throw it out of line temporarily, so long as there was not a proper relation, whatever that might be." (R. p. 427.)

Mr. McPherson, like all other witnesses on this subject, is driven to establish a relation between the State and interstate rates. It is a necessary assumption of the whole revenue theory that there must be a relation between the State and interstate rates in order to make the revenue theory of any value. That testimony will be referred to later, but attention is called strongly to the fact that Mr. McPherson, as all other witnesses for the railroad, necessarily base their revenue theory upon a relation existing between the State and interstate rates. When that relation is demonstrated to be nonexistent, necessarily the revenue theory is exploded.

By all rules of law and evidence, the burden is upon the railroads to prove this relation. That they have signally failed to do, and the State has disproved it. Mr. McPherson finally says that these inordinately low rates from Memphis, which were testified to by the traffic manager of his railroad, might affect the relations between the intrastate and interstate business, but he did not think it would do so materially. Then, again, he apologizes for the revenue theory by saying:

"I would say again that the revenue basis is not perfect. It is open to illustrations that would demonstrate that, but whatever the relations might be between State and interstate raffic rates, so far as my judgment is concerned, it would average up well, taking the whole into consideration, in its entirety." (R. p. 428.)

At other places in his testimony, he frequently says that he is not a rate man and knows nothing about rates, and declines to be questioned as a rate expert (see his statement, pages 402 and 436), yet a relation between the rate, State and interstate, is a necessary factor to make the revenue basis of any value whatsoever, according to his own testimony and admission. And yet he says he knows nothing about rates.

Mr. McPherson says:

"I don't understand the traffic proposition well enough to say what the relation between intrastate and interstate rates is. * * * I must assume that it exists. I believe that it is generally assumed that it exists. If the State rates for any reason are lowered, and that relation would doubtless continue under such circumstances. If the State rates are raised I presume that the relation is still continued by a raise in the interstate rates." (R. p. 429.)

He admits that when the rate is changed that it readjusts relations between State and interstate and readjusts the apportionment of expenses, State and interstate under the revenue basis, but he regards those readjustments as negligible quantities, and yet he admits he does not know what establishes the relation between State and interstate rates. He admits that commercial conditions largely govern both State and interstate rates, and that commercial conditions, as well as others that would enter into rate-making, would apply to both State and interstate rates. (R. pp. 429, 430.)

He finally says that the revenue basis must necessarily give and take in a great many ways, and no doubt illustrations could be multiplied showing where inequalities really would exist under the revenue basis of dividing expenses (page 431). He denies, however, that it gives unto the State which has low rates and takes from the State which has high rates. But that is necessarily the case. The higher the State rates in proportion to the interstate rate, the greater the expenses apportioned to State traffic is, and take States like Missouri and Arkansas, lying side by side, with one interstate rate prevailing for shipments, say from St. Louis to Texas, where the Missouri rates are lower than the Arkansas rates less expenses are charged to Missouri than would be charged to Arkansas, because less revenue is being produced from State traffic in Missouri than is being produced from State traffic in Arkansas, while the interstate traffic in each State bears the same the proportion of revenue, being divided and on a mileage scale.

This is pretty well proven in illustrations put to Mr. McPherson, although he denies them by taking refuge in his lack of knowledge of rates.

On re-direct examination Mr. McPherson says that the cost of the service is kept in view as a fundamental underlying principle upon which rates are fixed (page 435). Mr. Moore then called his attention to Mr. Flippen's testimony that the interstate rates were inordinately low in Arkansas from Memphis and asked him if it were true if the intrastate rates were less inordinately low would the low interstate rates affect the relation as between the two kinds of traffic? He answered that he would have to know the rates and conditions before he could answer the question. That it would be true if conditions were disturbed all round; there would be only one answer to that question, and the answer would be, if the conditions were disturbed all round the revenue basis would be the only basis that they could look to for any hopeful solution of dividing the interstate and intrastate expense of operation. He says that if both classes of rates were inordinately low, it would not affect the relation, and was asked if that would not depend upon the degree of inordination, but the counsel of the railroad preferred to make it a question of co-ordination (page 436). These questions were not answered, but answer themselves.

Mr. McPherson further says on re-direct examination that the revenue theory was the only basis that he knew of that would recognize the classification of commodities or articles that appear in the classes (pages 444, 445). In evidence introduced by the State it is shown that relation between first, second, third, fourth classes, etc., is demonstrated to be a pure theory and not existing in fact, but it is one of the theories which go to make up the argument for the revenue basis. Attention is called to it here, because hereafter attention will be called to the evidence which explodes it.

There is absolutely no relation between these rates, State and interstate. There is no relation between the classification, State and interstate, under which the great body of the traffic moves, and without that relation Mr. McPherson and Mr. Nay and Mr. Doddridge all are forced to admit that the revenue theory has no value. It is a theory absolutely opposed to the conditions, and it is a condition and not a theory which confronts the Court in determining the force of these facts.

Mr. Doddridge was the next witness on behalf of the railroads to sustain the revenue theory. He had had a wide and varied experience, having been general manager of both these railroads, but he has had no active railroad experience since 1900.

He admitted on cross examination that in the Missouri Rate Case and in this case he had acted as adviser to the counsel for the railroads, and in the Missouri case he had discussed the questions with a great many of the witnesses. (R. pp. 466, 467.)

So we may safely infer from Mr. Doddridge's position as adviser to the counsel in expert matters and put forward as one of the leading witnesses, his statements are entitled to consideration, at least. In the later development of the case much that had been said by Mr. Doddridge as to the physical management of the property has been disputed by witnesses put on by the railroads.

He says there is no method he is aware of by which the separation of the expense of conducting State and interstate traffic can be definitely ascertained, and the question arises as to the best manner of arriving at the truth in dividing those two kinds of traffic for the purpose of ascertaining the difference in cost of operation.

He then says there are several bases which have been spoken of, among them the ton mile basis and the revenue basis. He then proceeds to discuss the ton mile basis and attacks it as a proper method for dividing the expense of State and interstate traffic. As the State does not adopt it, although the railroads evidently thought it would, it is useless to follow his argument against it. It might be well, however, to call attention to the fact here that the State does use the ton mile basis for one purpose and one only, and for that purpose Mr. Doddridge says that it is a proper unit of division of such expense. And that is the use of it to divide the traffic between State and interstate on the same train, after the cost of that train has been ascertained.

He says the ton mile as a unit is available for a limited number of comparisons, such as testing the efficiency of car loading, train loading and average cost of revenue derived from certain commodities and the making of comparisons of one commodity with another upon the same railroad or upon different railroads. In the formula for this division prepared by the State, the expenses of the local and through trains are ascertained and then the proportion of interstate and State traffic in each of those trains is ascertained by using the ton mile, in that way deciding the efficiency of car loading and train loading for the actual cost of traffic between State and interstate (R. p. 454.)

After discussing the ton mile, Mr. Doddridge says to be fair and equitable a unit must be used that will reflect all of the average conditions under which the transportation is furnished and charge each ton mile or each passenger mile with the proper proportion of all the expenses. Then Mr. Doddridge continues:

> "In the establishment of rates many elements are considered, such as the physical cost of the service, the weight, the distance, the competitive conditions, the space occupied, the character of the service and the value of the service to the shipper. It is, therefore, necessary to use an arbitrary unit."

Then he says that, in his judgment, the best method that has been suggested for this purpose is what is commonly known as the gross earnings basis. That is, that the gross earnings derived from each

class of traffic for a given period being accurately known, the expenses between State and interstate traffic may then be divided and apportioned upon the per cent each class of gross earnings is made up of, thousands of small units, and they represent the amount received for transportation of the individual shipments. He then adds this statement:

> "The sums charged for transportation bear some definite relation to the cost. These sums vary, being governed by circumstances and conditions, such as weight, distance and classification, and the commercial conditions under which the transportation is furnished." (R. p. 455.)

As will be seen when the State's evidence is analyzed, the definite relation which the sum charged bears to the cost is an unknown quantity. It is true that it varies, as stated by Mr. Doddridge, and the variance is so great and without any system or relation with the cost, that it totally destroys the revenue as a factor to determine the expenses. The whole theory is predicated upon the indefinite hypothesis that the sums charged bear some definite relation to the cost, but no witness has been found to state what that relation is, and the State's testimony shows that it is nonexistent.

Then Mr. Doddridge takes up the commercial conditions and admits and explains how they influence railroads in determining the proper rates to be charged for transportation. He says that all of the elements of expense are reflected in the revenue, and by allotting the expenses in proportion to the amount which each class of traffic produces in the aggregate seems to be the most reasonable and equitable method by which expenses can be apportioned between State and interstate traffic. He says the difference in the value of articles transported and the liability incurred are always taken into consideration as one of the factors to be considered in the establishment of rates. This is undoubtedly true, theoretically, but as will be seen from the admission of the traffic men, who testified on behalf of the railroads and the demonstration of the rates themselves put in by the State, it is theoretical and not in actual use. Mr. Doddridge admits that there are many other considerations which affect the establishment of rates, such as competitive conditions between producing sections and consuming markets. He takes as illustration the interstate rates upon the products of the forest, which constitute a large proportion of the tonnage of Arkansas, and he says that they are established mainly upon the value of the service to the shipper and to the consumer, based upon existing commercial conditions, and that the physical cost of transportation individual cases being a secondary consideration, as a whole the traffic yields a profit either directly or indirectly. (R. pp. 455-457.)

That is the reason, from the railroads' standpoint, that this lumber is transported these great distances at the same rate; that the rate is divided in numerous cases between several carriers, producing a vary-

ing revenue on almost every car of lumber that moves through the State.

That method is not a subject of criticism in this case. That is for the railroad management to determine; whether it is good or bad is for them to determine.

But when they put forward the rates thus made, that are based upon the value to the shipper and consumer, and where the distance and the cost of the service is a secondary consideration, then they can not come in here and claim that the rate represents the cost of the service.

But to return to Mr. Doddridge's testimony. He says at page 456:

> "Changes in rates are necessary from time to time and would affect the allotment of expenses as between State and interstate traffic to that extent, while it is not contended that the actual physical expense would be changed."

He says that interstate rates frequently extend across several States and if below normal by comparison with other rates, for the reason stated, each State would bear its *pro rata* in the reduced expense thus allotted and interstate rates as compared to the total may be abnormally high, which would tend to equalize the condition in the example pointed out. Then he says that interstate rates into and out of Arkansas must be so adjusted as to enable its products to find markets in competition with other producing sections. This principle is essential to the prosperity of both the State and the railroads. Intrastate traffic depends upon this condition being maintained. This is an excellent argument in favor of commercial conditions fixing rates instead of the cost of service fixing rates, and may justify such anomalies as the lumber rates, but certainly this argument does not sustain the proposition that the revenue produced from these rates is a proper measure for the expenses of handling two classes of traffic.

After making the above argument, then Mr. Doddridge says:

> "Transstate traffic as a whole being carried at a much lower cost than short haul traffic, low interstate rates applied to that class of traffic in some cases works no injustice to the interstate traffic in the apportionment of expenses as a whole. The gross earnings method of apportionment of expenses deals with all of the intrastate traffic as a single unit and with all of the interstate traffic as a single unit, upon a system of general averages, without reference to individual shipments or particular rates." (R. p. 456.)

The next argument that Mr. Doddridge makes, is on the allotment of expenses to miscellaneous earnings. In his judgment the State has the best of it, because if there were no miscellaneous earnings from mail and express, the expense would not be very much reduced, as the necessity for running passenger trains would still remain. This is an admission against the accuracy of the revenue theory, but in this case against the interstate side of it.

He makes one statement in his direct examination, to which attention is now called, although somewhat of a digression, that is well worth looking into. He was asked how he thinks taxes assessed and collected in the State of Arkansas on the property of the railroad should be divided between State and interstate traffic, for the purpose of ascertaining the relative cost of those two classes of traffic and he answers that the apportionment of taxes should be based upon the relative amount of property used in the transaction of the different classes of traffic.

For the purpose of ascertaining the relative proportion of taxes on those two classes of traffic he says the proportion of taxes should be based upon the relative amount of property used in the transaction of the different classes of traffic. He says the result of that method of division would be to divide the taxes in proportion to the expense of operation, and that method was adopted by Judge VanDeventer in this case when he granted the temporary injunction, and that is a correct method. He says the division of taxes upon expenses is a correct method and it was adopted by Judge VanDeventer. (R. p. 465.)

In Judge Van Deventer's opinion there is something to that effect, but he obtained his expenses by the revenue theory and, of course, when he used his expenses to apportion his taxes he was using the revenue theory, although his mind evidently ran to the expenses as the proper basis for dividing the taxes.

Mr. Doddridge admits that if the Arkansas Commission should take out of the Western Classification various articles and add them to the commodity lists, thereby resulting in a reduction of revenue on intrastate traffic, it would follow under the revenue theory that this would cause a proportionate decrease of expense against the intrastate traffic in the division of expenses between State and interstate. (R. p. 477.)

At pages 479 and 480 of Mr. Doddridge's cross examination he says that in the division of interstate revenue where the traffic is carried over several roads it would be just to charge the middle road with a part of the terminal expense before the division is made, but that as a general rule that is not done. For instance, take a shipment from Chicago to Dallas, Texas. Say it originates on the Chicago & Alton in Chicago and is delivered by the Chicago & Alton to the Iron Mountain in St. Louis and by the Iron Mountain to the T. & P. at Dallas, Texas; there would be heavy terminal expenses on the C. & A. and on the T. & P. in delivering the shipment at Dallas. There would be no terminal expenses on the Iron Mountain, other than the expenses at division points, particularly in the State of Arkansas. And yet the interstate revenue would be divided in proportion to the mileage, utterly ignoring the heavy terminal expenses at each end of the line. Some system of general averages might equalize this, but no such system is shown and, as usual, Ark-

ansas would get the worst of it, because Arkansas has heavy shipments of cotton and lumber where the terminal expenses originating that traffic are very heavy and yet the interstate rate would be divided on a mileage *pro rate*. In other words, the revenue would be an inaccurate and unjust measure of the cost of the service in this respect.

He admits that he did testify in the Missouri case that the cost between State and interstate traffic could not be correctly determined without using a percentage based on opinion and judgment, and he also admits that it was not accurate and that it was not scientific, but he still clings to the contention that it is the best method or plan in his judgment, for the purpose for which it has been used. (R. pp. 480-483.)

He admits that the only use to which it has been put, has been in litigation and in questions affecting State regulations. (R. p. 481.)

Mr. Doddridge testified in the Missouri case and also in this case (R. pp. 499, 500) that if intrastate rates were put on a compensatory basis, that they would be prohibitive, and further, that it is impossible to have any State regulations, in view of his opinion, as to the cost of intrastate traffic. He says that for commercial reasons the railroads would not adopt a tariff that would be prohibitive, but that State regulations could not get a tariff high enough to be compensatory, therefore there could be no State regulations of intrastate rates. Mr. Doddridge is evidently right if his revenue theory is true. The higher the State rates are put, the more expenses are apportioned to State expenses, and then add the so-called extra cost of intrastate traffic on to the revenue divisions, then it is impossible for the States to have any regulations of passenger and freight rates which would be proof against an injunction as noncompensatory.

At page 502 he admits that there is no accounting system on the Iron Mountain or any other road, with which he is familiar, that will show the cost of the traffic except in a general way and that the only statistics they have are the ton mile statistics of their entire traffic.

Mr. Frank Nay, the comptroller of the Chicago, Rock Island & Pacific Railroad, was the only other witness the railroads presented who developed the theoretical side of the revenue basis.

Mr. Nay has given the most logical evidence of any of the railroad witnesses.

Mr. Nay, beginning at record page 630, gave a carefully-prepared essay which he read into the record. His testimony can not be summarized, and all material parts are copied in full:

"Practically all trains carry both intrastate and interstate traffic at the same time; a very large number of passenger cars and of freight cars carrying less than carload freight carry both intrastate and interstate traffic in the same car; both classes of traffic move over the same rails, roadbed, bridges, etc.; both classes of traffic are super-

vised by the same officers and employees; the accounting work is performed, for both classes of traffic, by clerks without reference to the time expended on either class.

"It is a fact that the two classes of traffic are handled simultaneously through all the various departments of railroad service in such a way that an accurate division of the operating expenses between intrastate and interstate traffic, is an accounting proposition which has never been solved, and probably never will be solved.

"In very rare cases, such as suburban traffic, lying wholly within one State, where separate tracks, equipment, etc., are used for such suburban service, a part of the expenses can be definitely assigned to such intrastate passenger traffic. Certain small railroads situated wholly within one State may be able to assign certain expenses to intrastate freight traffic, but as a general proposition, it is an absolute impossibility to make any definite and accurate assignment of the operating expenses of railways to intrastate traffic. Therefore, when for any reason it is desirable or necessary to approximate the operating expenses for intrastate traffic, some basis for such approximation must be selected."

Then he takes up the fact that the revenue may be accurately determined, the number of tons may be accurately determined, the number of passengers handled, and so forth.

Then he says that it is necessary to find some basis by which to apportion the expense side. He says:

> "In determining which one of the three factors, or bases, should be used the one should be selected which will more nearly represent the service performed, bearing in mind all the time that which is being attempted is the segregation of the total operating expenses of every character of freight and passenger traffic into two classes—intrastate and interstate; that the total amount expended is not increased or decreased, but the aim is to arrive at the best estimate of the proportion of operating expenses to be assigned to the class of traffic under consideration."

"First, with reference to passenger traffic: The passengers, the passengers' one mile, and passenger revenue, can be definitely ascertained for intrastate and interstate traffic separately, and the proportion of each one of these three factors, which is intrastate or interstate, may be positively known."

First taking the passengers; using the number of passengers as the basis, would assume that the cost of transporting a passenger five miles would be the same as the cost of transporting a passenger 500 miles, which is an absurdity, and hence that basis is discarded immediately and search made for something better.

Next, taking the passengers one mile; that factor measures the number of passengers and the distance, so that using that basis assumes that the cost of transporting a passenger 500 miles, is 100 times as much as the cost of transporting a passenger five miles,

which is obviously more nearly the fact than to assume that it cost the same to transport a passenger 500 miles as to transport him five miles. However, the cost of running a train is not greatly increased by doubling the number of passengers therein; as, for example, it would cost but little more to haul one hundred passengers a given distance, than to haul 50 passengers the same distance. Hence, it has been the custom of railroads for a great many years to make excursion rates, in order to produce train loads of passengers instead of having the cars partly filled; while the excursion rates are at a low average rate per passenger per mile compared with the maximum rates the remuneration to the railroad company is greater with such low average rates because the cars are filled, thus producing a higher average revenue per train mile and causing only a slight additional cost for hauling a train with all the cars filled over the cost of hauling one with the cars practically empty. Where the traffic is regularly heavy, the rates are frequently lower than where the traffic is light; as, for example, the average suburban service of the various railroads conducting such service into the city of Chicago, is handled at less than 1 cent per mile, because of the density of the traffic. Therefore, we find that the passenger mile basis is faulty and that the passenger revenue will more nearly correspond to the expenses of the service. If the revenue per passenger per mile was uniform in all cases, the passengers one mile basis would be as good a basis as the passenger revenue in approximating the division of the operating expenses between intrastate and interstate, but since the passenger revenue recognizes certain conditions herein explained which are ignored by the passengers one mile, the best basis known at this time for approximating the operating expenses of intrastate passenger traffic is the passenger revenue basis.

As to freight traffic, first take the tons transported; this basis considers weight only and to use the tons hauled as a basis for dividing the expenses between intrastate and interstate freight traffic, would assume that the cost of hauling a ton 1,000 miles is just 100 times as much as the cost of hauling a ton 10 miles; that the cost of hauling freight in carload lots per ton is the same as the cost of hauling the same kind of freight in less than carload lots; that the cost of hauling a ton of coal is the same as the cost of transporting a ton of showcases; that the cost of hauling a ton of baskets is the same as the cost of hauling a ton of brick; that the cost of hauling a ton of paper boxes is the same as the cost of hauling a ton of canned meats. That the cost of hauling a ton of chicken coops is the same as the cost of hauling a ton of cement in sacks; that the cost of hauling a ton of lantern frames is the same as the cost of hauling a ton of gravel; that the cost of hauling a ton of millinery is the same as the cost of hauling a ton of pig iron; that the cost of hauling freight in full train loads where the engine is loaded to its maximum capacity, is the same per ton as the cost of hauling freight in trains where the

traffic is light and moves in short trains where the engine is not loaded to nearly half of its capacity. The ton basis is very faulty, and is immediately discarded for something better.

Next, taking up the ton mile basis; this basis modifies one fault of the ton basis because it takes into consideration both the weight and the distance, but it assumes that the cost of hauling a ton 1,000 miles is exactly 100 times the cost of hauling a ton ten miles; it is manifest that such is not the case, because there are terminal expenses in connection with every shipment, and the longer the distance carried, the less per mile is the cost of terminal service. Other factors exist which operate to make the cost per mile less on any shipment when the length of haul is increased. This fact is recognized by all rate-making bodies, including the various State railroad commissions which make rates; that is to say, none of the commissions, nor any other reputable rate-making bodies, make the rate for 300 miles 30 times that for ten miles. Such rate-making bodies recognize the fact that the cost per mile decreases as the length of the haul increases, and the rates are made accordingly; therefore, even if we had only the two conditions, weight and distance, to measure, the ton mile basis would be faulty for the reason that it assumes that the cost increases in exact proportion to the increase in the length of the haul and the increase in the weight; then again, the ton mile basis has all of the objections to the ton basis, with the exception of the one which is modified by taking into consideration the distance; but, as has been stated, the cost does not increase in exact proportion to the increase in the distance; for these reasons, a basis is sought which will give more satisfactory results than either the ton basis or the ton mile basis.

The only basis left is the revenue basis.

As has heretofore been stated, the revenue basis assumes that the cost of the service increases when the haul increases but not in proportion to the length of the haul; thus, the rate on a given shipment for a haul of 50 miles is not ten times the rate for a haul of five miles, because it is universally recognized that the cost of a haul of 50 miles is not ten times the cost of the haul for five miles. The rates for distances are graduated, and, while they are increased for greater distances, the increase in the rate is not in proportion to the distance; hence the revenue basis takes into consideration the fact that the cost of the service does not increase in proportion to the length of haul, which is ignored by the ton mile basis; in fact, the ton mile basis assumes positively that the cost of transportation does increase in exact proportion to the increase in the length of the haul. Then again, the rate for carloads is less than the rate for less than carload freight, thus recognizing that the cost of transporting less than carload freight is greater than the cost of transporting carload freight. Likewise, the rate on coal is less than the rate on fruit and vegetables or live stock, because it is recognized that the

cost of transporting fruit and vegetables or live stock is greater than the cost of transporting coal, and so on, the various illustrations heretofore given about baskets and brick, millinery and pig iron and so on, could be mentioned as illustrating the fallacy of the ton mile basis; or, rather, the superiority of the revenue basis over the ton mile basis. In portions of the country where the traffic is very great and is moved in full train loads, the rates are usually made lower per ton mile than in portions of the country where the traffic is very light and moves in short trains, with only a few cars in a train. The ton basis, or ton mile basis, would assume that the cost of transporting freight which required the use of special equipment, such as refrigerator cars, stock cars, etc., was the same as for transporting ordinary dead freight, not requiring the use of any special equipment, but the rates for such freight requiring special equipment are usually higher than those for ordinary dead freight not requiring special facilities and equipment, and therefore the revenue basis recognizes the cost of transporting such freight requiring special equipment, is greater than the cost of other freight which does not require such special equipment and facilities.

A large number of other conditions which are considered in the rate used in arriving at the revenue might be mentioned, and thus show the superiority of the revenue basis over either the ton or ton mile basis. It is not claimed that the rates are made on the actual cost of service, but that the cost is consciously or unconsciously given consideration in making rates, and that any rate schedule made by a reputable rate-making body will give evidence of the fact that the cost of transporting different kinds of freight is given consideration in making the rates.

An argument is sometimes used to the effect that using the revenue basis is like traveling in a circle, and those who take that position claim that when the revenue of intrastate traffic is doubled, the operating expenses are also doubled, and the end is just the same as in the beginning. The following illustrations will demonstrate the fallancy of that argument:"

Then he gives an example of its operation when the rates of intrastate traffic are increased and the interstate is not, and the expenses are stationary. It is, excepting the figures used to illustrate his point, exactly the calculation made by Mr. Kimbell, at the request of the State, exhibit 23, heretofore set out. (R. p. 635.)

Mr. Nay concludes as follows:

"While it is recognized that it is impossible to accurately divide the operating expenses for freight traffic between intrastate and interstate traffic, it is believed that the revenue basis is preferable to either of the other two available bases, and that an approximation of the operating expenses of intrastate freight traffic, or interstate freight trains, based on the revenue derived from such traffic as compared with the revenue derived from both kinds of traffic, more nearly approximates

the facts than by the use of either the ton or ton mile basis, which are the only other two bases available.

After making the basis approximation of the operating expenses for intrastate freight or passenger traffic, the figures thus arrived at may be increased in the proper proportion to represent the excess of of the cost of transporting intrastate traffic over the cost of transporting interstate traffic.

Q. You mean by that you make your computations on a straight revenue theory and then add to your State traffic such proportion as you think the State traffic should bear?

A. Yes, sir."

Special attention is asked of the testimony of Mr. Nay, given on cross examination.

Q. Mr. Nay, as I understand the substance of your testimony, it is you prefer as more nearly accurate the revenue theory than the other two theories you mentioned in your testimony?

A. Yes, sir.

Q. You do not mean to state that the revenue theory would bring exact results, do you?

A. No, sir; I think I stated in the opening that to bring an exact division between State and interstate expenses was an accounting impossibility, that we had not yet found a solution of.

Q. Necessarily, the revenue basis is dependent upon how nearly the rate is based upon the cost of the service, isn't it?

A. Yes, sir.

Q. If the rate does not reflect the cost of the service, then this as a basis for ascertaining the respective expenses, intrastate and interstate, would not be of value?

A. If that was true. If the rate did not reflect at all the cost of service, it, of course, would be of no value.

Q. Its value is entirely dependent upon how nearly the rate reflects the cost of service?

A. Yes, sir.

Q. Have you had any experience in rate-making?

A. No, sir.

Q. That is outside of your experience in railroad matters?

A. Yes, sir.

Q. Your knowledge upon that is largely theoretical, I assume?

A. Well, it is based on the knowledge of classifications and tariffs that have been prepared by other people.

Q. That is what I mean. It is not first-hand knowledge?

A. No, sir.

Q. It is knowledge that has come to you from your experience in the auditing department of railroads, and so far as you are concerned is theoretical; isn't that true?

A. You mean the knowledge of?

Q. Of rate-making?

A. Yes, sir; of rate-making. (R. pp. 654-5.)

* * * * * * * * *

Q. That is on the assumption that there is a relation between the lowering or raising of State rates to the interstate. If that proper proportion were not kept between them, then the value of the revenue basis would be destroyed, wouldn't it?

A. No, sir; it might be somewhat impaired, but certainly not destroyed.

Q. It would be very considerably impaired, wouldn't it, Mr. Nay, if both rates were changed and no change in the rate proportion to each other?

A. Well, not necessarily. It might have been they were not in proper proportions in the first place. That, of course, involves the making of rates.

Q. Of course, you would have to assume at some time a proper proportion between them?

A. But the assumption is, as stated in my direct examination, that the rate-making bodies, while they do not take the cost of service as an exact basis, yet every schedule of rates they produce will give evidence on its face, practically every schedule, that the cost of the service is considered. (R. pp. 658.)

* * * * * * * * *

Q. The fact that I asked you in particular was, if the facts existed that way, will the revenue basis be a proper measure of relation between State and interstate rates?

A. Well, for the revenue basis to be the proper measure excluding in this consideration the addition of anything for increased cost, the State rates should be enough higher than the interstate rates to balance that excess of cost which operating men say exists in connection with State business over interstate business, and if the State rates were not sufficient to produce that revenue, the State basis would be faulty to that extent. And if they were too high and so much higher than interstate rates, of course it would be faulty the other way.

Q. The point of that testimony to which I have just called your attention, is this: There was not a proper relation between State and interstate rates during the period we have under inquiry (that is 1907) and if that is true then the revenue basis would not be a proper factor with which to apportion the expenses, would it?

A. Well, it would not be an accurate factor, but being, in my judgment, the best that is known, it would be the proper one. I think in the first question you have the word "accurate;" it is not an accurate factor.

Q. It will fluctuate according to the fluctuation between State and interstate rates?

A. Yes, sir.

Q. And it will, of course, be inaccurate to the extent that the proper relation does not exist between State and interstate rates?

A. Yes, sir; I think that is true.

Q. And when the rate does not represent the cost of the service, it would not be of any value at all, would it?

A. Well, if there was such a rate, no sir; it would not be. If there was any such rate that did not represent the cost of service at all.

Q. Now, Mr. Nay, does not the rate presuppose it covers the cost of service and a profit also?

A. Surely, I would think it would. As I say, I am not a rate-maker, but it would seem that the railroads should have some profit or return upon their investment.

Q. There should be two factors in that rate; one, the cost of the service; and the other, the profit to the railroad company in performing the service?

A. If I were making rates, I think as a novice, I would use those two factors. I suppose there are others. There are commercial conditions which necessarily govern; and of course, the density of traffic which reduces the cost of the service.

Q. That just goes to the cost of the service in that particular country, I should take it?

A. Yes, sir.

Q. Then it depends upon how much profit or how little profit the railroad company puts into its rate, as well as those other matters, in order to use the basis as a factor to determine the expenses; isn't that true?

A. I should not think the profit would make any difference, Judge Hill. That is, as to the relation between the different kinds of rates. Because I should assume that where a profit was made and my opinion is probably not worth much on that point, but I would assume it to be distributed pretty evenly over all the rates. (R. pp. 659, 660.)

Not only the cost of the service, but the profit of the railroad must find reflection in this rate. And Mr. Nay further assumes that the profit is evenly distributed over all these rates, State and interstate.

Mr. Nay made another explanation, to which attention is called:

Many of the witnesses for the railroad, patricularly the traffic men, were continually referring to the *"relation"* between State and interstate rates, and none of them could locate that mythical being. Mr. Flippen and Mr. Watson made desperate efforts to locate it, and so far as their testimony is concerned, it is a trade relation, an adjustment between trade centers, or something of that kind. Of course, such relations between State and interstate rates when taken to measure the expenses, is nonsense. These traffic men, like Mr. Flippen and Mr. Watson, are out of their domain when they were speaking of these relations in the sense of an accounting proposition—what they had in mind, as shown by their testimony, is the relation of

rates between St. Louis and Memphis and New Orleans and the Atlantic seaboard. Those trade relations and balances; these differentials that exist, 30 cents from St. Louis over Memphis; and 20 cents from Chicago over St. Louis; and all these various differentials that adjust the relations between the various trade centers for commercial and competitive reasons. Those are the relations that the traffic men have in mind. They are the relations they know about. Those are the relations they are talking about.

Mr. Nay is a man of great accounting experience, and he recognized those facts at once.

"Q. If there is a larger profit in the intrastate rate than in the interstate rate, owing to competition that largely controls the interstate rates, wouldn't that fact, the difference in the profit on the two rates make it unfair to use the revenue, intrastate and interstate to measure the expenses of operation with?

A. Of course, in the first place it would depend on what basis was used in determining the profit was larger in one case than in the other. But if that could be absolutely determined beyond any question of a doubt, which is an impossibility, I think, then, of course, the revenue basis would be faulty to the extent that difference existed. Going back to the same statement again, that the revenue basis is not a perfect basis, but is the best known basis at this time.

Q. It seems to have several faults, doesn't it, Mr. Nay?

A. These faults are really the same fault under different names, I think.

Q. Not under different names, but under different circumstances; isn't that more clearly the case than under different names?

A. My idea in making the statement that they seem to be the same fault was that the two rates, intrastate and interstate, seem to be out of proportion to each other, and that is what produced this unfairness that is spoken of. If they were in exact proportion all the time, the revenue basis would be a perfect basis.

Q. And if it represented the cost of the service? You would have to have that also?

A. I presume if they were in proper relation to each other they would represent the relative cost of the service. When I say "in proper relation to each other" I mean in reference to the cost of the service.

Q. Some of those traffic men use that term in an entirely different sense. I think your use of it is correct, but you will see from the testimony the others use it as having a proper adjustment to the commercial conditions. A just rate of one trade center with another trade center. That is the reason I was particular in calling your attention to it. You mean by it a proper relation of the cost of the service; isn't that right?

A. That is what I had in mind.

Q. That is what you had in mind in your testimony generally, I assume?

A. The proper relation?
Q. The proper relation of cost, you mean?
A. Yes, sir; the proper relation in regard to the cost. (R. pp. 667, 668.)

The foregoing is a complete summary of all the material evidence of the plaintiffs to support the revenue theory.

While we have interspersed it with our comments, yet we have endeavored to set forth fairly the position of each witness in his own language.

(1) THEORETICAL SIDE OF THE REVENUE BASIS.

The State's Evidence.

On this opinion side of the proposition, the State introduced H. C. Whitehead, W. E. Fitzgerald, Henry Wilmering, R. D. Parker, C. B. Bee, Charles S. Ludlam, C. W. Hillman, T. A. Hamilton and T. F. Wharton. Mr. Whitehead is a public accountant and auditor practicing his profession in Chicago. He had thirty-five years in railway service, beginning as office boy and ending as General Auditor of the Santa Fe Railroad, which position he held for nine years, and was then consulting auditor for two years, his active railroad service ending in 1907. He was connected from the beginning with the American Association of Railroad Accounting Officers and was its president.

There is no witness presented by the railroads who has had an experience which would better qualify him to speak on this question than Mr. Whitehead.

The plaintiffs have put forward Mr. Nay as having a great accounting experience. Here is a gentleman who had exactly the same experience and held a similar position on the Santa Fe Railroad as Mr. Nay's on the Rock Island.

He says the method pursued by the railroads for dividing State and interstate expense is in his judgment not a sound basis. "That basis is not sound," he says, "where you attempt to divide the expenses as a whole, or a portion of them on that basis. My personal reasons for my view are, that in the case of a trader in merchandise—he would, if he followed that line of argument or reasoning—determine his cost on the basis of his sales of his product; and it further implies the assumption that the end and aim of the railroad enterprise is gross earnings and not net earnings, as I look at it." (R. p. 1077, 1078.)

Mr. W. E. Fitzgerald, at present Auditor and Expert Accountant of the Railroad Commission of the State of Texas, is the next witness to whose testimony your attention is invited. Mr. Fitzgerald had 24 years' experience in railroad service, before he became Auditor and Expert Accountant of the Railroad Commission of Texas, as voucher clerk, general bookkeeper, chief clerk and various other

accounting positions in the accounting department of different railroads. Since becoming an official of the Commission, his work and study has led him into broader fields which caused him to investigate the questions involved in this litigation. He is familiar with the various bases of division of railroad expenses, such as a ton mile, train mile, car mile, etc. He was asked his opinion of the revenue basis as a method of ascertaining the expenses of State and interstate traffic. He says that it appears to him to be an exceedingly erroneous basis, in view of the fact that the operating expenses of a railroad bear little relation to its income or revenue derived from traffic, for these reasons: First, the preponderance of expenditures being apportioned as a whole on a basis irrespective of revenue coming in, makes the expenses largely independent of the amount of traffic, the constant expenses being considered as an average, we will say of 60 per cent. Second, it is a well known fact that the actual cost of service is more often disregarded in arriving at rates, the same being based frequently on other conditions, such as competition or commercial conditions, industrial developments, etc., without any consideration to the distance of the haul. In his opinion the revenue theory would not be a fair basis under these conditions. (R. p. 1081.)

On re-direct examination Mr. Fitzgerald said that since he had been at work with the Commission, they have had under consideration methods of dividing expenses between State and interstate traffic. It was a live question before his Commission and one to which he had given study and thought. The conclusion which he and others connected with the work have reached is, to start with obtaining a unit of revenue on each class or commodity. The Commission has required reports to that end, the intention being not to make any changes in connection with the expenses, until they are better satisfied as to a plan that might come nearer bringing an approximate result. In other words, they are trying to find out from the railroads the cost and the revenue on given commodities, both local, intrastate and interstate. (Rec. p. 1105.)

Mr. R. D. Parker, a civil engineer by profession and expert engineer of the Railroad Commission of Texas, is the next witness to whose testimony attention is invited (R. p. 1161). Mr. Parker is an educated engineer, with much experience in the practical operation of railroads, before he became connected with the Commission. His testimony is largely upon the technical questions, filling in some of the technical sides of the State's system of separating State and interstate business. Attention will be called in another connection to the force of his testimony along those lines.

After explaining the use of the various bases which were adopted by the State's accountant and approving them in their effort to properly allocate State and interstate expenses—he was speaking more particularly of maintenance-of-way, as that had been the line of his work chiefly before he went to the Commission, he having

been in charge of some division of the Southern Pacific Railway, in charge of maintenance-of-way; Mr. Parker was asked whether in his opinion, based upon his experience in the study of these problems, if the expenses of State and interstate business could properly be divided on the basis of revenue derived from each class of their business, and whether such divisions would fairly reflect the cost of operation, as he has observed the cost of operation in his practical experience. He says that it would not be a proper basis; that he can have no conception of a division on the revenue basis of reflecting in any manner the way in which the service accrued. In the first place, the idea of expense carries with it the cost of it and the basis should be on the cost, not on the profit that accrued from the business; and any manufacturing establishment predicates the price of their commodity on the cost basis, plus a reasonable profit. The railroad company has transportation to sell. While he doesn't say the cost of the service controls the making of the rates, yet there are a great many items that enter into it and he does not believe from his practical experience in the operation of railroads and the expenses incurred thereon, that the revenue properly reflects a division of these expenses between State and interstate traffic. (R. p. 1167.)

Mr. Henry Wilmering is Auditor of Accounts and Statistics of the Corporation Commission of Oklahoma. He had various positions in the railroad service prior to his engagement by the Oklahoma Commission, which are set forth in his testimony, beginning at page R. p. 858. He had been with the Corporation Commission of Oklahoma for several years, and has made a study of the accounting system put in force by the Interstate Commerce Commission, and has given much time and thought to railroad accounting, and the distribution of railroad costs. He has heard the testimony of eminent railroad accounting officials, and attended the conventions of Railroad Accountants. He has read the works of Professor Adams, of the Interstate Commerce Commission, and has endeavored in every way to get all the light possible on these problems. He was asked as to the value of the revenue theory of dividing property in the State between State and interstate traffic, and said it is not a fair basis and that the property assignable to any character of business should be obtained on a cost basis. If the rate is increased or decreased the value of the property will be correspondingly increased or decreased on the same volume of business, and will be put up or down according to the rate, and is therefore too elastic. There should be some fixed basis that would in some way assign the property to some particular class of traffic that would be more rigid than the revenue. He was given the rate of increase in the State and interstate revenue per ton mile as shown in the exhibit, after the injunctions were obtained and the railroads made both intrastate and interstate rates; and he said it illustrated the objection he urged to the

revenue theory as throwing an extra burden on the State traffic without, in fact, there being any increase in the property devoted to State uses. (R. pp. 860-862.) He thinks property should be divided on the expense basis, as it is obvious that the expense would remain the same whether the rate was increased or decreased, and it is a more rigid way of ascertaining the value of property not subject to the ups and downs of rates. Then he was asked as to his opinion as to dividing the expense between State and interstate on the revenue derived from each class respectively: He said he had worked out the formula in numerous ways and applied it to the railroads operating in Oklahoma, and found always, owing to the higher rate of charge for State business, it showed unreal profits for interstate business, and the extra cost theory, in addition to the revenue basis shows there would not be any rate made by the State authority that could not be declared confiscatory.

He says he believes that the formulas were invented for litigation purposes only. (R. p. 862.) Mr. Doddridge stated substantially the same thing. (R. p. 481.)

Mr. Wilmering then goes on to say that in a general way he is familiar with the rates in effect in the Southwestern country, and said, as a general proposition, they are not made on the cost of service and they are largely made on tradition and primarily made by the traveling freight agent or contracting agent after feeling the pulse of the business around the territory occupied by his company, and they make the rates irrespective of cost of service, to get the business. He heard many eminent railroad traffic officials testify on this subject, but never heard one state positively that he had any regard for the cost of service in making rates. The railroads have no cost accounting system by which they could ascertain the cost of handling any given traffic. The only statistics they have is the aggregate cost per ton per mile of the entire system of all business, without any differentiation of the particular commodity. (R. pp. 862, 863.) He knows of many rates prevailing in this section of the country that are made upon the zone or blanket-rate, and that is one of his reasons for stating that the rates are made irrespective of cost. He explains the lumber zone rates (R. pp. 863-4) as affecting Oklahoma. As they are explained more fully as affecting Arkansas in another connection, his testimony will not be followed on this point. He shows there is a wide difference in the revenue received from rates for the same service by the railroad from these zone or blanket rates. The grain rate is a similar one. There is a difference in the grain rate on grain moved into Oklahoma from five miles per ton to 20 mills per ton per mile, and there is a large volume of traffic moving under these varying rates into Oklahoma. The same thing is true of rates on crude oil and petroleum and its products from the Kansas refineries to the Gulf and the same conditions prevail on coal. He found in

investigating tariffs that there are more than 10,000 rates in existence that are lower per ton per mile from mines in Indiana and Illinois to points in Dakota, Minnesota and other States, than any rates ever made by the Corporation Commission of Oklahoma or the Railroad Commission of Arkansas. (R. p. 865.)

He takes up the Texas common point rates. These are explained by other witnesses as affecting Arkansas, and it is not necessary to follow them with Mr. Wilmering. (R. pp. 865-874.)

He says that in his State there is a very short haul. And the rate per ton per mile for interstate business through the State is very thin, which results in assigning to the Sate, on account of this high intrastate revenue per ton per mile, a large volume of expenses; and that this traffic passing through Arkansas or Oklahoma, being long haul traffic, where the rate is "thin"—as the traffic men express it—they take out of that a mileage proportion for Arkansas or for Oklahoma, as the case may be, and use a very low interstate rate with which to measure the interstate expenses. And the lower your rate the lower your expenses, under this revenue theory; and the higher the rate the higher the expenses.

So by taking these long hauls on this Texas common point traffic (and it is a large traffic), and the same is true about the lumber traffic, it is a long haul, and the rate is exceedingly thin per ton per mile, and that is divided between Arkansas and the balance of the system on the milage in Arkansas, thereby assign to the interstate traffic a thin share of expenses.

As Mr. Wilmering puts it, at page 866, this assigns unreal expenses to the State—and that is a very happy expression of his—"unreal expenses." He says all of this is true without any regard to the question of the extra cost of 100 per cent or any other percentage to be added to it.

Mr. T. F. Wharton, a member of the firm of Haskins & Sells, certified public accountants, is the next witness for the State. His testimony begins at page 1000. Mr. Wharton is the only witness who has had no practical railroad experience, but he has had a very wide experience in installing cost accounting systems in various branches of business, and various industries, some of them of gigantic proportions, where the factory owner or plant, of whatever nature, wants to put in a system and does put in a system which allocates all the expenses, so they will know what it costs them to manufacture each article.

That is done in a scientific manner and they can find out to a nicety the cost of any product, by putting in a scientific and accurate accounting system.

Mr. Wharton's life has been devoted to that work.

Except in this and the Missouri case he has given no thought to railroad work. But he applies the same principles and says they should be applied the same as to any other great industry in the

country. He states that they do by various systems allocate the expenses of the various departments of any business so they can intelligently and scientifically make out what each article costs.

Mr. Wharton first discusses division of property on the revenue basis, and says he does not see any relation between the revenue of each class of traffic with the property sought to be assigned to either class. His opinion is that the cost basis would be a more correct basis, owing to the fact that the cost would take into consideration the elements of extra use of the property required, if any extra property is required in the service performed, and that would better measure the property required; and, furthermore, it would not be subject to fluctuation, except the fluctuation of expense, and not to the fluctuation of revenue.

In regard to the revenue as a basis for dividing expenses, he says it is no basis of division at all. (R. p. 1013.)

The next witness is Mr. Charles S. Ludlam. His testimony begins at page 1309.

He is one of the partners of the firm of Haskins & Sells, and lives in New York.

He gives an interesting account of the firm of Haskins & Sells. Then he takes up his own career and gives his experience in railroad work. He was an auditor and accounting officer for several railroads and for some land and mining companies before he became a public accountant.

Since he has been a public accountant his firm has had the auditing and supervision of the audit of a great many of the largest railroads in the United States.

This railroad audit work is in charge of Mr. Ludlam, for his firm.

He says as accountant he does not feel himself at liberty to give the names of any of his clients for whom he has worked, except where the companies publish the certificates of the audits made by his firm.

Mr. Ludlam gives in his testimony the names of some of the companies who publish their certificates of audit. Among them are the Louisville & Nashville, the Lehigh Valley, the Atlantic Coast Line, the Philadelphia & Reading, the Erie, the Mobile & Ohio, and the Carolina & Northwestern.

When such large railoads as these publish the audit of Mr. Ludlam and his firm, there can not be any question of his ability to discuss railroad accounts.

He was one of the accountants attending to the State's side of the Missouri rate litigation also, and, of course, has necessarily had to give a great deal of investigation to this very problem before us.

He takes up the testimony of the railroads, particularly that of Mr. Nay, and calls attention very sharply to this proposition:

Mr. Nay says after you get your division of cost then you have to add something to it to make it of any value, viz., the extra cost of intrastate traffic.

Mr. Ludlam is one of those positive men, and probably his emphasis gave some offense to Mr. Nay. He spoke of Mr. Nay's testimony as being like building up a "snow man," and in Mr. Nay's testimony in rebuttal he resents his argument being described as being like a "snow man" built up and then knocked down.

He said another trouble about it was that after you got your basis it was not a basis; you could hardly find any two men who would agree as to just what you would have to add to it after you got it.

He said in the Missouri case the variation was much wider than it was in this case, and some one started out in the Missouri case with the statement that it was 15 times State over interstate—probably it was Mr. Sturgis of the Burlington.

Mr. Ludlam analyzes the revenue theory thoroughly, and an excerpt of his testimony can present it better than a summary of it:

Ludlam's Analysis of Revenue Theory.

"A. It is absolutely contrary to all accounting principles and practices. I have never heard the revenue theory advanced for a basis of determining the expense, except in the Missouri case and in the State of Arkansas case.

Q. In what way does it run counter to accepted accounting principles?. A. I would say both the manufacturing, wholesaling and retailing and railroad business, on the ground that the ratio of profit is not the same on all transactions and necessarily can not be.

Q. When you go to ascertain the value of the property, what significance do you attach to the gross earnings of the property?

A. Given the gross earnings by themselves, they would mean nothing. I might illustrate that by saying that if an investor was thinking of buying a factory it would mean nothing at all to him to know that the gross earnings of that factory were a million dollars a year. He would have to know what the expenses and net earnings were. He would probably base his ideas of value upon the net earning capacity of the property.

If a man was going to buy a sugar factory, we will say, and an automobile factory, and he knew that the gross earnings of each was one million dollars, and that the combined operating expenses of the two, we will say, 75 per cent of the earnings, it would never occur to him to buy the sugar factory or the automobile plant on the basis of the expenses being the same as the ratio of expenses of the two together. He would find out as positively and definitely as it could be ascertained, on the actual facts, what the actual expenses and the gross earnings of the particular factory he was thinking of buying were.

You asked me about the relation of gross earnings. A plant might be earning a million dollars gross, and still be losing money; whereas another plant might be earning a million dollars and earning a large per cent of profit. Consequently, unless you considered the expense

and the resulting net earnings, the gross earnings mean nothing in themselves.

Q. Yet the railroads have used gross earnings in this case to determine the relative expense of State and interstate business?

A. Yes, and I think it is illogical, unsound and contrary to all accounting principles, and I think Mr. Nay, in his last paragraph, illustrates that more forcibly than anything I could say. It looks to me as though he had built up in several pages of essay an elaborate—you might call it a snow man—only to knock it down in the last three or four lines; because he proceeds to say after you have thus determined your costs, they are not your costs, but you must find out what they are.

Q. I believe he also stated, if I remember it correctly, that unless there was a proper relation between the State and interstate rates—and by relation he meant relation of cost one to the other—that the revenue theory of dividing expenses would have no value.

I think that is the substance of his statement on that.

Assuming that to be correct, what are you going to do with the extra cost that you have to put on it after you get it bottomed on the theory that there is a cost relation between the two to start with?

A. You will have to ask somebody besides an accountant, I think, to find that out.

Q. Have you given study and investigation to the subject of whether there is a relation, cost relation, I mean, between the revenue derived from State traffic and the revenue derived from interstate traffic?

A. Yes, sir.

Q. What have you found in that regard?

A. As a result of my study, I am of the opinion that there is no relation; not only between State and interstate, but between the different rates in interstate and State.

Q. What do you base that on, Mr. Ludlam?

A. The examination I have made of the rates in the State of Missouri and the State of Arkansas, in a general way, and also the exhibits which have been filed in this case.

Q. Do you understand from your investigations, the system upon which interstate rates are built?

A. In the sense that they are made largely on competitive and commercial conditions; I would not say as to any individual rate.

Q. I am not speaking of individual rates.

A. I know in a general sense, for instance, that rates from St. Louis to New Orleans are cheaper than from St. Louis to Little Rock, which illustrates the point I am trying to make.

Q. Are you also familiar with the varying distances on which large movements are carired on the same rate? You have looked into those propositions, I presume?

A. Yes, sir; in a general sense. Divisions that are made on tap line connections; things of that kind.

Q. Mr. McPherson says in his testimony (R. p. 320):

"My reasons for this opinion are that the revenues of the railway are derived from different sources; the transportation of passengers and freight, and from miscellaneous services rendered, rentals, etc.

"A division of these earnings can be exactly ascertained, and, naturally, they reflect the value to the railway of each class of the service it performs."

Then he follows:

"The passenger and freight revenue consist of both intrastate and interstate traffic; the revenue from each of which can also be exactly ascertained. Moreover, the 'revenue basis' is reflective of the efforts of the traffic men who make the rates, to consider, in a measure, the value and character of commodities, and the risk and distance attached to their transportation. This is apparent in the classification of commodities into classes and the different rates established for their carriage.

"The revenue derived represents the well-established and generally recognized elements considered in fixing rates of the railway for the service it performs."

Then he takes up some illustrations. Now, I ask you to state what is your view of that analysis of the situation by Mr. McPherson?

A. Assuming that Mr. McPherson refers to the gross earnings, I disagree with him, because the value to the railroad of the business which it does is the net earnings which it derives therefrom, and not the gross earnings which it receives therefor.

Q. That is true whether you take it as referring to passenger and freight; State or interstate; miscellaneous, or what not?

A. Yes, sir. Naturally the value of the business is what it will earn, not what it will earn gross, but what it will earn net. It would not profit a railroad to take a million dollars' worth of business if it cost them a million and a half dollars to execute it.

Q. I call your attention also to the fact that in this case the railroads divide their property which is in the State of Arkansas, between State traffic and interstate traffic, in proportion to the gross earnings of each, after setting aside the miscellaneous.

I will ask you what your view is of that division?

A. I think that division is wrong, on account of the fact that the gross earnings, which fluctuate with every change in rate, are not, in my opinion, a fair basis to divide the property. I think you have a more equitable division if you will apportion your property on the basis of the cost.

In my judgment, the cost would represent more correctly the use made of the property by the different classes of business.

Q. Suppose there was an increase in State rates, without any exact proportional increase in the interstate rates: What effect would that have on a division of the property or a division of the expenses?

A. The amount which the State rates were increased in excess of the interstate rates would, on the basis of apportioning the property on the gross earnings, naturally increase the property assignable to the State business.

Q. Have you seen the exhibits worked out here by which it is shown that there was an increase of nine and a fraction per cent on interstate rates, and an increase of ninety-six and a fraction per cent on State rates, put in by Mr. Kimbell?

(This was for month of January, 1909, when the railroads had a free hand and made both State and interstate rates.)

A. Yes, sir; that increase appearing during the month of January.

Q. Yes. These figures, as I understand it, represent the increase of revenue per ton mile.

That is necessarily, is it not, a result of fluctuation in gross revenue, that every time there is a change of rate, either State or interstate, as the case may be, producing a change of revenue, that there will be a change in the amount of property apportioned to the respective class and a change in the amount of expense apportioned to the respective class, when in fact there is no change?

A. Yes, sir. Apportioning the property, expenses or anything else on the revenue basis would naturally mean that if you carried a piano one day at one price, over a certain part of the road, and a month afterwards you carried another piano of the same kind over the same piece of property and charged twice as much for carrying it; that your cost was twice as much and the proportional use of your property was twice as much in the latter case as in the former.

Q. If that piano happened to move in State business and the rate was double, it would to that extent increase the State property and State expenses?

A. Yes, sir; when figured on the gross revenue basis.

Q. If it happened to move across a State line and the rate was doubled or trebled, it would to that extent decrease the amount of interstate property and interstate expenses, and as a matter of fact there is no increase or decrease, as the case may be, in either, by reason of the change of the rate on that piano?

A. There would be no change in the cost or use of the property on account of the rate changing.

Q. Suppose they increased the piano rate 9 per cent in interstate traffic and 96 per cent in State traffic; where would you be then?

A. I think you would be just where you started, on a false premise, on the revenue basis.

Mr. McPherson says (at page 320, 321):

> "The revenue, therefore, expresses value, character, risk and distance, rather than quantity; and likewise considers to no little extent, the question of cost, as it is obvious that it costs more to transport some commodities, and commodities in small quantities, than it does other commodities, and commodities in larger quantities.

"A consideration, therefore, of cost on the mere basis of quantity, would mean the blending of all classes of freight; a reduction of all classes of freight to a common unit, and the assumption that the cost of their transportation was equal. Also that the length of haul and other conditions affecting the cost were equal or the same.

"For these reasons, in my opinion, the revenue basis is a proper basis on which to apportion the cost, or to divide the cost of operation as between intrastate and interstate traffic."

I wish you would state wherein you think that is based on a wrong premise, if you do think so?

A. He says, if I understand your reading correctly, that they consider—

Q. Look over it, if you did not catch it.

A. (After examining statement)—many other elements rather than quantity. I never heard of a railroad rate that did not consider quantity.

I disagree with Mr. McPherson in this, because I think railroad rates do consider quantity equally with value, risk and distance, and I disagree with him in his premise that the revenue—by "revenue" meaning gross earnings—considers to no little extent the question of cost.

He goes on and it seems to me he contradicts himself, because he says:

"It is obvious that it costs more to transport some commodities, and commodities in small quantities, than it does other commodities, and commodities in larger quantities."

I am unable to understand what he means when he says that they don't consider quantity, and then says that it costs more to transport commodities in small quantities and others in large quantities.

Q. Does the revenue derived from the rates represent the cost of the service, as you find it in your investigations in your railroad experience?

A. No, sir.

Q. Is there any system, to your knowledge, by which a rate-maker can ascertain the cost of service?

A. I don't think the rate-maker, as a rule, has any specific data as to the cost of the service.

He knows in a general way how much it costs per ton per mile to move freight on his railroad—as a general rule he does not have that information by divisions—and he knows in a general way—to use the illustration that has been referred to here frequently, that a carload of baskets won't weigh as much as a car of pig lead, and therefore has some idea of equalizing, that they should charge more per pound for a carload of baskets than they should for a carload of pig lead.

Q. Well, there is a vast difference of expense upon one division of the road than another, I should take it.

A. Yes, sir.

Q. We had evidence here this morning that the difference in the ratings of locomotives on the White River branch of the Iron Mountain and locomotives that were run on the main line of the Iron Mountain:

Q. What effect would that have on the cost of the service?

A. There would be a great difference in the cost of service on different divisions of the line, according to the grades and curvatures.

Q. And the ability of the engine to handle larger or smaller trains, I suppose?

A. Yes, sir.

Q. Suppose there was a lime kiln on the White River branch on the Iron Mountain road and they wanted a lime rate; that lime would move on every other line of the road:

How would the rate man know the cost of the service when he started in to fix that rate?

A. I have never seen any statistics of any railroad company that would show the specific cost by divisions of handling lime or any other specific commodity.

Q. Have you seen the statistics of any of the railroads in operation in this Southwestern country that show the cost per ton per mile in the handling of the various commodities?

A. No, sir.

Q. Has any system been worked up so that a rate man can have the cost per ton per mile on coal, lumber or merchandise, as the case may be?

A. No, sir; not that I know of.

Q. Have you gone pretty fully into railroad accounts in this country and investigated that, so if there were such systems you would have some familiarity with them?

A. Yes, sir.

Q. Then, when these gentlemen speak about the cost of service being reflected in the revenue, I would like to know if you can explain to me what basis they had in mind when they made these statements, if you are able to do it?

A. I think their basis is theory, the same as the revenue basis, and not facts.

Q. I presume the rate-maker has before him, or should have before him, the cost per ton per mile of handling freight upon his entire road for the preceding year:

What value would that be to him in making specific rates?

A. In my judgment, I should say only in a general way. It would give him an idea, roughly, of the average cost of moving freight on his line, and, in a general sense, a figure below which he would try not to go.

Q. That is about as far as they have gone in the statistical work of the railroads in the Southwest, is it not?

A. As far as I know; yes, sir. (R. pp. 1315-1320.)

The next is the testimony of Mr. C. W. Hillman—which begins at page 1479.

Mr. Hillman is now an accountant, president of the Mutual Audit Company, of Louisville, Kentucky. He is 53 years of age. He is an educated man, a college graduate, a graduate in civil engineering. His first railroad work was engineering work on the Cumberland Valley.

Then he determined to go into the operating department of railroad service and went into the office at Carlisle, Pennsylvania. He went in as a mesesnger in order to learn the business of telegraphing. He served in various positions, ticket agent, freight clerk, scales clerk, yard clerk, agent and as assistant dispatcher, stationed at Harrisburg, Pennsylvania. He then went to Chambersburg, Pennsylvania, and was the superintendent's clerk, transferred very shortly to the position of assistant dispatcher at Chambersburg, the headquarters of the road.

He remained there until the fall of 1880, when he resigned and took a position in the treasurer's office of the Northern Pacific Railroad, in New York City. His duties there were that as stock bookkeeper, keeping record of the transfers of the capital stock of the road.

Six months afterwards he was transfer agent of the road and had charge of the transfers of both stocks and bonds.

He worked in various capacities in that office for seven years and was then elected assistant treasurer of the Northern Pacific road, with headquarters in New York City.

In 1891 he was transferred from the New York office to the Chicago office of the Northern Pacific road, that line having then leased the Wisconsin Central and obtained control of the terminals in the city of Chicago, and the express business of the Northern Pacific was placed in his charge.

He served the Northern Pacific until 1893, when it went into the hands of a receiver.

He served the receiver for 18 months and when the control of the road passed into other hands he left there and took the auditorship of the Metropolitan Westside Elevated Railway Company.

He devised a system of accounting for that road and placed it in operation.

The management of the road changed in 1903, and he left the road and went to the Rock Island for a year or a little longer, in the office of the assistant comptroller.

He had special charge in that road of the insurance matters, having been in that line when he was connected with the Northern Pacific.

He left there and went into the public accounting business for himself.

He has represented the Railroad Commissions of Kentucky, North Carolina, Alabama, Florida, Minnesota, Illinois and Ohio.

He has recently been engaged, but has yet not done active work, by the Railroad Commission of Indiana.

He was called into consultation for a short time in the Missouri case, but his work was merely advisory and he did not get into the details of that case.

He has been the accountant handling the Minnesota rate case.

He has, of course, given a great deal of thought, study and investigation to these problems.

He first takes up in the discussion of it the claim that the opposition to the revenue theory is in opposition to court decisions; he says that it has been used in these cases because it has been the only factor presented, and the factor most nearly representing the truth in the given cases, but he says he finds there is no adjudication anywhere that it is of itself a proper factor, and that each case must depend upon its own facts. That he does not consider that in criticising the revenue theory he is criticising any judicial utterance supporting it of itself.

Beginning at page 1482, the first reason which he gives for saying that the revenue basis is unsound is:

> "That in the use of this factor, the earnings equalized the operating expenses; all matters are handled on the same percentages.
>
> "This leads to the second point, that an unjust rate, one which is producing too high an operating revenue, would be enabled to perpetuate itself by having assigned to itself a high operating cost, and the converse of that proposition, which is that a non-remunerative rate, one causing a loss, would also tend to perpetuate itself by having assigned to itself a low operating percentage.
>
> "Also, the contention on the part of the carriers of the inadequacy of a rate, and the contention on the part of the State of the unjustness of a rate, would necessarily in each case be measured by the yardstick that is in dispute, which is the earnings." (R. p. 1482.)

Now, that is exactly the situation here. This evidence is full of criticisms of the State's rates, that they are too low, and not properly adjusted; that they do not bear any proper relation one with the other, or with the interstate fabric; and yet the railroads are using the earnings from that yardstick to measure the cost of doing their business, both State and interstate.

Mr. Hillman says:

> "We can illustrate that, perhaps, by taking the comparison of the roads having a longer mileage than other roads between certain points; that is, a road which is in competition for a large portion of its business with short line competitors. This road

must necessarily spend more money in handling trains because it has a longer haul and, therefore, increase the cost of what you might call 'haulage expenses,' and it also must offer extra inducement in the way of equipment in order to obtain the traffic over its longer road, or it must have more expert traffic men, solicitors who can obtain business for them, even under these adverse conditions, and such men come high and must be paid higher salaries than the average traffic man.

"Yet, under this plan of the gross earnings basis, the relative expenses in these two roads would be measured by the earnings and it alone.

"This is quite forcibly illustrated in the Minneapolis & St. Louis Railroad, which is one of the parties to the rate case in Minnesota.

"This road is in competition with other roads for Chicago business. The route from the Twin Cities to Chicago is over the Minneapolis & St. Louis to Albert Lea; from Albert Lea to Chicago over the Illinois Central.

"In handling the grain business from the West, the Minneapolis & St. Louis, together with other roads, are compelled to grant a mill-in-transit privilege at the various mills along the road, principally those at Minneapolis.

"The result is that on this rate the Minneapolis & St. Louis will take a carload of grain and haul it to Minneapolis at its local rate. If this car is destined to Chicago, or the products of this car, after milling, is destined to Chicago, the road is then compelled to haul this car from Minneapolis to Albert Lea, 113 miles, without receiving any compensation whatever, the entire proportion of that through rate going to the Illinois Central road. Therefore, on the carload of grain passing locally from a point in Minnesota to Minneapolis, the M. & St. L. will collect a full rate.

"On another car going the same way, to Minneapolis, being milled in transit, and then proceeding on its way to Chicago, they will obtain exactly the same rate, plus $2.00 per car for the privilege of milling-in-transit.

"As the expense of milling-in-transit amounts to something, the practical result is that the earnings on a car from the western part of southern Minnesota to Minneapolis, and the earnings on another car from the same point to Minneapolis and thence southward to Albert Lea—a distance of 109 miles—are the same, while the expense of handling must necessarily be larger.

"This condition of affairs is borne out by the analysis of the M. & St. L. accounts and is used by me as an illustration of the unfairness and inadequacy of the earnings basis for a division of the expenses.

"Where this method is used, as it is often used by railway

companies, for the division of expenses, first adding an arbitrary varying from 15 to even 100 per cent as an extra charge, or an extra cost of carrying intrastate freight over interstate freight this inadequacy and unjustness of the earnings method is accentuated.

"The usual method of applying that is to consider that it costs 15 per cent more of the gross earnings to do one class of business than the other, regardless of how those gross earnings may be made up, whether on a ratio of intra, two, and inter, one; or whether that ratio is intra, one and one-fourth and inter, one.

"To the earnings intra, will be added the arbitrary percentage of 15 per cent or more. To that result will be added the entire earnings and a percentage taken of the totals, and that percentage is used in the case of this arbitrary addition of the amount which we assume to be 15 per cent, as the percentage of expenses which should be charged to intrastate.

"This is the method adopted by the Chicago & Northwestern Railway Company in their exhibits, in the case against the State of South Dakota."

Q. Mr. Hillman, you are stating the matter too modestly for the railroads in this case. They charge from 100 to 400 per cent on the freight and 25 to 50 per cent on the passenger, intrastate, extra expenses.

A. I left a little margin. I said, "15 per cent or more."

Q. It is the "more" proposition we are up against here. Did you finish?

A. I finished concerning the expenses. I believe our question, if I recollect it correctly, also asked concerning the apportionment of the property—

Q. Before you go into that, I want to ask you a question on the subject of expense.

Has your attention been called to a claim of a parity or relation between the rates, State and interstate, as affording a means by which the two classes of traffic could be measured, the revenue produced from these rates? Have you made any investigation as to that question?

A. I have given no investigation to that phase of the question, personally. Of course, in the hearings where I have been, that matter has been up, more or less, and has been discussed, and I will say here, very much in the same manner as of the showing of Mr. Hamilton yesterday on this stand.

As an illustration, in showing graphically the rates which were in existence on railroads and which were proposed tby the Minnesota Commission, I had made a graphic representation of those, using first-class only, to show how they would work out.

I have not presented it in the Minnesota case, but it was referred to in that by me in my testimony.

Q. Is there any such relation between them, so far as your investigation as an accountant went—

A. No, sir; I should say there was not. (R. pp. 1482-1484.)

Mr. T. A. Hamilton was the last witness to speak on this subject. His testimony, beginning with his personal history, commences at page 1402. He filled many minor positions in the railroad service, in which he had spent his life until 1906, when he entered the employ of Haskins & Sells as an accountant, in which service he has since continued.

His railroad experience splendidly equipped him for the work of investigating railroad accounts and rates and railroad operations, in which work he had been engaged in the Missouri rate litigation and in this litigation. His testimony in regard to the revenue basis is found at pages 1478 and 1479, and is as follows:

Q. Now, to go one step further: Take the evidence that has been introduced in this case as to the rates—principally this which you have been developing—which it is apparent does not represent the cost of service in the instance given: I will ask you what is your opinion, as an accountant, based upon the experience that you have had in the accounting problem, of using the revenue derived from these rates, or, rather, these two sets of rates, interstate and intrastate rates, to measure the cost of operation of business, State and interstate?

A. I would say in that connection that I agree most heartily with Mr. Nay. As I heard him say in this case, the value of the revenue basis is predicated or is dependent entirely on the assumption that the rates are based on the cost of service.

I think that it is a plain proposition, and, as a matter of plain logic, if your revenue is derived from rates which are not based on the cost of service, it is mathematically impossible to accurately divide those expenses on the basis of factors derived from that revenue. If there is no relation between the revenue and cost, I can not see how you can use the revenue to divide cost.

Q. In your experience as an accountant, have you known the revenue basis to be used as a method of ascertaining the cost of production?

A. No, sir; never.

My first acquaintance with the revenue basis for dividing operating cost or cost of production was in the Missouri Rate Case, where it was presented by the railroads.

Q. I call your attention to the further statement made by Mr. Nay, that the revenue theory was not only dependent upon the cost of service, but also dependent upon their being a proper relation of cost between the State rates and the interstate rates, and ask you,

from your experience with the rate situation in Arkansas, whether there is such a relation in the State and interstate rates so that those could be used as the two yardsticks with which to measure the cost of service of that respective kind of business?

A. There may be rates published effective in Arkansas, which are built in that way, but they are few.

When you consider the whole rate fabric, as I have found it in going through the company's waybills, which are records of actual movements, as I have been illustrating from these lumber and other movements, considering it all, there is not any such thing. If there is we have not been able to find it.

Q. Take, for instance, this: What relation could there be between the lumber moving interstate on these various tariffs that you have put into evidence and the lumber moving within the State on Standard Distance Tariff?

A. I think I have made illustrations this afternoon to the effect that the further you haul the lumber the lower the rate you get. I know the Standard Distance Tariff increases the rate according to distance.

Q. That makes the relation or parity between those an impossibility?

A. Yes, sir; that is a good instance of it.

It is respectfully submitted that on the theoretical side of the question, the preponderance of the evidence is decisively against any value ataching to the revenue as the basis upon which property and expenses may be divided between State and interstate.

(2) THE RELATION OF THE RATES TO THE COST OF SERVICE.

The General Proposition.

As has been seen from the testimony of the opinion evidence supporting the revenue theory, the fact that the rates represent the cost of the service is a necessary predicate to give value to the revenue derived from the rates as a proper factor to use to divide property and expenses between intrastate and interstate traffic. In fact, that is the major premise, and the minor premise is the relation between State and interstate rates—cost relation—not trade or commercial relation. Without these predicates the revenue basis to divide property and expenses has no value whatever is the admission made by the learned doctors advocating it, as heretofore seen in the quotations given. Mr. McPherson and Mr. Nay testified that after the expenses are divided on the revenue basis between intrastate and interstate, then, to obtain a correct result, there must be added to the intrastate expenses the percentage, which, in the opinion of operating men, should be added thereto in order to equalize them; in other words, the revenue basis without the element of added cost does not obtain

true results, but is merely used to obtain a result to which something else might be added, towit: the extra cost, so when it is added, then the object to be attained—the true separation of the two classes of expenses, would be accomplished. This alone should be a refutation of the fact that a cost relation exists between the State and interstate rates. If such relation did exist, then a division on the revenue basis might accomplish the result sought, a fair division of expenses of the two classes of traffic using the revenue as a factor, but when something is to be added to the result obtained by using this factor, then clearly there is no cost relation between the two classes of rates, or this additional element brought into the case to make the basis true would not be needed. Certainly there is no relation between one State system and another. Texas, Arkansas, Oklahoma and Missouri each has its own system of rates, and Missouri has two systems, one south and the other north of the Missouri River. The interstate rates prevailing in these four States are practically the same, with many exceptions, and it depends on how high each of these States make their rates as to the degree of confiscation each is working. The higher the intrastate rate the greater the confiscation, according to this revenue theory. There is much testimony in this record in regard to whether the rates are based on cost of service, but the differences of opinion between the various rate experts on opposite sides are more in detail than principle. The rate experts introduced by the railroads have admitted freely that commercial and competitive conditions largely control the rates, and have, at the instance of the State, put in hundreds of illustrations of rates upon large movements, which are not based upon the cost of the service, but into which some other element entered and controlled the making of the tariff. The differences may be summed up about as follows: The rate experts on behalf of the railroads contend that the element of cost is always considered, while not always controlling, and that it is an exceptional condition which makes rates not based on the cost of service; while the rate experts introduced by the State contend that the rates made on account of competition, commercial or trade conditions, are the prevailing rates, and that the movement of traffic is largely upon those rates, and not upon such rates as those wherein the cost of the service may have been a controlling element.

Plaintiff's Evidence.

The railroads introduced five witnesses on this proposition—Mr. B. M. Flippen, Traffic Manager of the Iron Mountain; Mr. C. E. Perkins, General Freight Agent of the Iron Mountain; Mr. J. D. Watson, Assistant General Freight Agent of the St. Louis Southwestern; and on the passenger side of the proposition, Mr. Charles L. Stone, Passenger Traffic Manager of the Iron Mountain, and Mr. R. H. Laing, of the St. Louis Southwestern, and Mr. F. O. Becker on classification, Mr. Flippen made this general statement: "In fact, the making of

rates have to do with the commercial conditions; the cost of service; the conditions generally; and where the earnings have not been, as we figure it, compensatory in respect to State traffic, the same is frequently true of interstate adjustments, because one is so very seriously affected by the other."

That is probably as concise a statement of the whole railroad attitude upon this subject as can be found. On cross examination he was asked:

"Q. You can not fix rates on the cost of operation?

A. You have to fix rates on the cost of operation in a general way, or you will not land right." (R. p. 248.)

Mr. Flippen stated that the adjustment of the interstate rates was relatively higher than the State rates. His attention was called to the fact that Mr. Kimbell, Assistant Auditor of the St. Louis Southwestern, had filed an exhibit showing that upon his road the revenue produced per ton per mile for intrastate freight was about two and one-half that produced by the interstate freight, and he was asked if that was true on his road, and he answered that he had made no computation on those points. (R. pp. 249, 250.) The statistics heretofore quoted on his road show that the interstate is 6.750 mills per ton per mile; intrastate, 13.877 mills per ton per mile. This witness, put on by the railroads, as an expert on questions of relating to State and interstate rates, was absolutely ignorant of the fact that on his road the revenue per ton per mile from intrastate traffic was twice that of the interstate traffic, and that his companion road, the one with which he ought to be almost as familiar as with his own road, the revenue was two and one-half times greater per ton per mile for the intrastate traffic than the interstate traffic; and yet, with this density of ignorance on hand, he devotes many pages to the relative adjustments and relation of State to interstate rates, leading to the theory that the intrastate rates are confiscatory. He was asked when his road put in a rate to meet competition, what consideration was given in the making of the rate, and he said competition, but not competition necessarily alone; that it is either the road meets the rate formulated or ignores it. He says there is a potential competition—one not active—such as river competition. He was asked if he took into consideration the cost of service when making rates to meet a competitive one. He said: "In a general way, we can not lose sight of that fact. We figure we do not like to sell our goods at less than cost, and still we do not always know what it costs."

Q. Why, don't you know what it costs?

A. No man has ever been able to figure out just what it costs to handle any one particular commodity in relation to the whole traffic handled by a railroad company.

Q. If you meet a rate at a competitive point you fix your rate primarily on the rate your competitor has fixed; on what basis does your competitor fix his rate?

A. There might be a variety of things which would fix it for him. He might make an inordinately low rate on the raw material into a manufacturing point, contingent on the manufactured article going out at a high rate. And, therefore, taking it as a whole, it might be remunerative. Or it might be a low rate, State rate, predicated on a high interstate rate, and it might be remunerative.

Q. Don't you have any statistics compiled by which you can get at the cost of handling a given commodity?

A. The costof handling any given commodity can not be figured; no, sir." (R. pp. 250, 251.)

Mr. Flippen developed this further point:

"Q. Then the rate is more a relative proposition than it is one of cost of operation, isn't it?

A. No, sir; you can not say that. You must bear in mind the cost of operation, or you would not be making the rate. The rate is the price at which we sell transportation; and you must bear in mind, according to the best judgment and experience of men who know what it costs, otherwise we would not be making a rate. You would not last long if you made it without regard to that." (R. p. 252.)

Further on he said:

"Q. In speaking of the cost of transportation awhile ago, on cross examination, you stated that in many instances it would be based on what the traffic would bear; please state what you meant by that statement, and in what sense you used it?

A. I meant by saying that the rates were made upon just what the traffic would bear, considering the competitive conditions. Certain traffic will only bear a certain measure of rate in competition with a similar article or commodity produced in some other State or some other section of the country directly competing with this particular article in a common market of purchase.

* * * * * * * * *

Q. In your efforts you tried to avoid making rates that will be prohibitive to some of the industries upon your line?

A. Absolutely so. If rates were made so as to restrict or prohibit the movement of certain articles, then the general effect upon the development of your traffic and your earnings which is not confined to that particular product, as it were, but it is the general development of the country in which it is produced, and the contingent qualities or features which bear upon the production of this particular article.

* * * * * * * * *

Q. Is the average cost of handling business any indication of the cost of handling any particular commodity or kind of business?

A. That is simply one element. There are various elements that enter into the question of rate-making. There is competition; the amount of tonnage involved; the movement of traffic in one direc-

tion *versus* the empty car movement in the other direction. And all those sort of things.

* * * * * * * * *

Q. Is the average cost of handling business any indication of the cost of handling any particular commodity or kind of business? The question is, is the average cost of handling the business any indication of the cost of handling any particular commodity or kind of business?

A. As I said this morning, it is absolutely impossible to figure what it costs exactly to handle any particular commodity or article. It may be figured in its relation to the whole. You can not segregate it." (R. pp. 260, 261.)

Mr. Stone's testimony has heretofore been abstracted, in discussing the alleged interference of State rates with interstate rates. His testimony was largely upon the effect of the two-cent rate in Arkansas, the substance of which is heretofore given. Mr. Stone tells us that competition has fixed the rates through Arkansas on California business, and that his road has met the rates fixed by its competitors. (R. pp. 271, 272.) He gives much interesting information as to what rates are fixed by competition, and what are not. Mr. Stone states that his road enjoys more intrastate traffic in Arkansas than interstate, and that it gets much more revenue out of the intrastate, and that the intrastate is more profitable, but when asked if the intrastate traffic was much more profitable at two cents, stated that it was not, but that he had no statistics on the subject that would throw light upon it. (R. p. 274.)

Mr. R. H. Laing, Assistant General Passenger Agent of the St. Louis Southwestern (his testimony appears with the State's evidence, but he was plaintiffs' witness), gives testimony principally on the readjustment of the passenger rates when the fare was restored to three cents. He was asked if the reduction of the State passenger business in Arkansas affected the Texas excursion or homeseeker's rates from St. Louis or Memphis, and he said it did not affect the rate per mile to any extent. He says the Arkansas reduction to two cents did not affect the California rate, but the Missouri reduction did. (R. p. 1614.) Mr. Laing tells of various specific rates affecting Arkansas, which are controlled by competition, the details of which are not profitable. (R. pp. 1614-1616.) He was questioned as to variation of rates, and this occurs (R. p. 1616):

"Q. Is that rate based on the cost of service?
A. No, sir; it is not.
Q. Is it not on the cost of service?
A. No, sir.
Q. Is not that California based on cost of service?
A. I don't think so.
Q. What is it based on?
A. It is simply an agreed rate.

* * * * * * * * *

Q. An agreed rate?

A. Yes. There is no basis for it.

Q. No basis for it?

A. Some thought that was the right figure and put it there.

Q. Is that the sum of the local between here and California?

A. No, sir.

Q. These gentlemen have been teaching me that is the way rates are made.

A. That is the rule; yes, sir; but there are a few exceptions to the rule.

* * * * * * * * *

Q. Do you know the cost per passenger mile for carrying passengers in Arkansas?

A. No, sir.

Q. Do you know what it is in Texas?

A. No, sir.

Q. Do you know what it is in Missouri?

A. No, sir. I am not familiar as to the cost of doing business.

Q. The cost of doing business—the cost of handling business. You make the rates generally?

A. No, sir; the State Legislatures have been making them.

Q. Do they make the interstate rates for you?

A. Practically, yes.

* * * * * * * * *

Q. Do you think the State Legislatures makes them on the cost of the service?

A. I don't know, sir.

Q. Does your office make them on the cost of the service?

A. No, sir; we don't.

Q. What do you make them on?

A. We make them so much per mile, as a rule.

Q. What determines it? How do you figure that?

A. Well, in the State of Arkansas we figure out a rate of three cents a mile.

Q. Not all of them do?

A. Ninety-eight per cent of them.

Q. Well, let us see about it. Don't you have a lot of books to sell down there at two cents?

A. No, sir.

Q. Or, at two and a half cents?

A. No, sir. We honor an interchangeable mileage credential.

Q. Don't you issue them?

A. We are a party to an arrangement under which travelers get a net two cent per mile.

Q. Do you not sell a good many of those books, or honor a good many of them?

A. We honor quite a number; yes, sir.

Q. Don't you sell these 2½-cent-rate tickets then where the Rock Island and these other roads come in competition with you?

A. We meet competition, but there are very few points between which their fares affect us.

Q. The Iron Mountain meets them at a good many points, does it not?

A. The Iron Mountain will meet them probably more than we do.

Q. Do you think that 98 per cent of your rates through Arkansas are 3 cents?

A. Our one-way fares; yes, sir.

Q. I am not talking about one way; I am talking about the whole business. We are not taking it piecemeal.

A. One-way fare is really the basis for everything. That is the standard.

Q. I am asking you about what your fares are in Arkansas, and you said 98 per cent was three cents. After calling your attention to those—

A. I would not say that on 98 per cent of our business we get three cents per mile.

Q. I didn't think you would when you thought about it.

A. But you take our tariff, and the figures are 98 per cent of three cents a mile. (R. pp. 1616, 1617.)

Further on this question was asked:

Q. Is it the cost of the service that you consider when you fix those Hot Springs rates and California rates?

A. Well, the passenger department, as a rule, does not figure on the cost of service.

Q. It does not? Are you sure of that, Mr. Laing?

A. They figure on the amount of business that can be secured." (R. p. 1619.)

Mr. J. D. Watson, Assistant General Freight Agent of the St. Louis Southwestern, testifies, as does Mr. Perkins and several other witnesses, as to the effect of the classification upon rates. As no one was so well authorized to speak on the subject of classification as Mr. F. O. Becker, Chairman of the Western Classification Committee, whom the railroads put upon the stand, we will omit the discussion of this subject by other witnesses, and give it fully as outlined by Mr. Becker. Mr. Watson brings out the fact where the article is changed to a commodity rate, it is taken out of the classification; and that the volume of traffic and commercial conditions incident to the marketing of that particular traffic is what produces the commodity rate, and its elimination from the class rates. (R. p. 556.)

"Q. Is there any uniformity of rules among railroads governing the cases in which commodity rates shall be applied?

A. Uniformity as to locality only. For example, in the lumber district, each line would have lumber commodity rates; and in a coal

district each line would have coal commodity rates. (R. pp. 557-8.) The commodity rate is fixed in the territory involved, from the point of origin to destination, or where the commodity is marketed; and is governed almost entirely by commercial conditions. If, for any reason, the carrier feels the rate is from common point too low to be handled with profit, of course the carrier would not make as low a rate by its rails as would be applicable by some other line. From local points the rate is fixed with a view of earning a reasonable revenue for the service performed." (R. p. 558.)

He says that the commodity rate is fixed in various ways by the cost incident to the service, as to the particular traffic, "minimum weight is one. That is fixed by the difference in the cost of the service. For example, if the minimum weight has to be low, as in the case of hay, you make a higher rate on account of the low minimum weight, but, hay being a necessity and governed by various and sundry considerations other than value, a very low rate is necessary in that case. Each commodity in itself has its own rules and regulations governing the fixing of a rate." But in no case are commodity rates fixed without regard to cost of service. (R. p. 558.) He says: "The commodity rates are governed by the same conditions that govern the rates generally. In addition to that, the volume of the traffic; value of the traffic; the direction of the movement, and the length of the haul, are governing factors in the fixing of rates on commodities, on rates other than those that are classified, and in taking them out of the classification." (R. p. 561.) On cross examination he says that he does not believe that Standard Freight Distance Tariff No. 3 was ever represented as a properly constructed tariff, and that he does not think it represents the cost of the service, nor anywhere near it. Furthermore, he says that he does not think that any tariff could be used to determine the cost of the service; that in addition to the cost of the rate, you should have a profit. (R. p. 569.) He says that the cost of service can not be absolutely determined and that he has not stated that rates are based entirely on cost; that the cost is one of the controlling factors in fixing certain commodity rates, and that the cost can be approximated; that from the accounting department they have the revenue per ton mile, but he does not think that is the proper measure of the cost, but use can be made of it in this way; that it would be improper to assign a rate to any particular portion of the traffic, which would yield a less revenue than the general average on certain classes of traffic; but he admits that they have no statistics on any particular class of traffic. (R. p. 570.) The only service that the statistics of the cost and of revenue per ton per mile is to determine as near as can be where the minimum rate should be. He says they have no separate figures on any separate commodities or classes, and merely have the general result in ton miles. He says there is no cost-accounting system in use on his road. (R. p. 571.) "I

don't think I said that we got at the cost of service, because we do not get at the cost of service; but we have a general idea of the cost of transportation, and that idea fixes for us the minimum charge that we can afford to handle traffic for.

Q. You state that that idea fixes the minimum charge; where do you get that idea?

A. We get that idea altogether from the reports—from various sources, compiled by the Accounting Department—the ton-mile basis of the whole aggregate tonnage; that fixes the general question as to the actual cost for all classes of traffic. Then we must take into consideration our experience and knowledge of the cost of handling the different kinds of traffic, and from that deduct the result that we must have to determine whether we shall handle it or shall not handle it; for example, we would haul stone for considerably less than a higher class commodity.

Q. But you have no data at all to show the cost of handling stone?

A. Absolutely none.

Q. Now, you have referred to commercial conditions; I wish you would explain just what you mean by that term, as a factor in fixing rates?

A. That term has a general application in fixing all rates on commodities that must move. Probably one of the best explanations is the lumber proposition. A mill is located in a certain district, and it must meet competition with another mill handling the same class of lumber in another district. There is a commercial condition the railroads must meet in order to carry the commodity.

Q. In other words, you must foster the industries on your line and protect them in marketing their products?

A. That is one commercial condition.

Q. Then, the competition is another commercial condition?

A. That is a competitive condition; that is not altogether a commercial condition.

Q. You are not including that in your term "commercial conditions?"

A. Competition between localities would be included in commercial.

Q. But as between railroads it would not?

A. Yes; that is a competitive condition.

Q. Those two factors largely enter into the determination of the rates, where they do enter into them, have a large bearing on the volume of the rates, and when the rate is fixed to meet competition, or to meet these commercial conditions you have referred to, it fixes them on a different basis than the basis of cost?

A. Necessarily." (R. p. 577.)

Mr. C. E. Perkins, General Freight Agent of the Iron Mountain, testified, like Mr. Watson, largely of classification, and his discus-

sion of that will be omitted. He was asked if the railroad company in fixing commodity rates paid regard to the cost of service and said they regard the cost of service always; that is, they attempt to do so; that commodity rates are often fixed on commercial conditions which necessitates special rates, but they always tried to make a profit on the business which they handled. (R. p. 593.) In regard to the division between connecting carriers who transport lumber and other commodities from zones, Mr. Perkins says it is always a matter of negotiation and agreement. "There is this general principle, however, that the originating line gets the largest share of the earnings; that is, according to distance. In other words, it gets more than a mileage *pro rata* would yield for the reason that its service is considerably more; for the reason that it originated the business and must furnish the equipment for hauling the business; reasons of that character. (R. p. 596.) Mr. Perkins says that classification committees do not fix rates, they simply assign the articles to the various classes, and that classification applied to the tariff enables the railroads to fix the rate. Each road and each section of the country is governed by its own individual rates. They will use the same classification individually in all of the territory west of the Mississippi River. The rates on the Iron Mountain would be very different from the rates on foreign roads. (R. p. 599.) Mr. Perkins was called upon to identify various tariffs and maps, illustrating the tariffs, which was attached as exhibits Nos. 38-44 inclusive, known as the zone maps. (R. pp. 614, 648, 649.) He was asked if his road furnished any record of the cost for the movement of lumber, or any other article, and said it did not; that in the making of a rate the traffic officials had no data whatever as to the cost of the service on any particular commodity. They have the data of the cost of the service as a whole. and they have statistics of the revenue per ton per mile, and that is of some service as a guide to how much revenue they should receive from different commodities. (R. pp. 615, 616.) The following is his statement of how rates are made: "We know about what our general revenue is and about what our general cost is, and we know from our classification the relative adjustment you might say which we must assign to the various commodities to bring about that revenue. Some articles we know are handled at less cost and must be handled at a lower rate than some other commodities, and our rates are adjusted really on a relative basis. That is, on the various commodities. The rate which we would assign to each one varying, of course, as to the commodity, as to its value and as to its cost and as to the direction of its movement, and as to the length of its movement.

Q. Then you do use these ton-mile statistics showing the cost per ton per mile of your entire traffic in order to divide the charges to be apportioned to one traffic as against another kind of traffic?

A. No, sir; I can not say that we would do that. As a matter of fact, our rates are fixed—that is, our general line of rates, you might say, are a fixture. They have been established for a great many years. There have been changes in this rate or that rate, but the general rate fabric has been in existence, of course, with the changes that are necessary, for years. We know about what results that rate fabric brings us. We know we are charging a little more on one article than on another. But that relative adjustment with all these other incidents I have mentioned—that is, the direction of the haul, the length of the haul, the bulk and value of the commodity to be handled, commercial conditions, all govern us in making a rate on any specific commodity.

Q. That rate is not made on the cost of the service, is it?

A. Yes; fundamentally it is.

Q. What do you mean by "fundamentally?"

A. I mean that the cost of the service enters into our rate-making to a very large extent. I do not mean to say by that the actual cost of the service, but the relative cost of the service.

Q. I am talking about actualities and not relations.

A. The only way we could make this is on a relation adjustment. (R. p. 616.)

* * * * * * * * *

Q. Where do you get the figures upon which to base that relative adjustment?

A. We do not have actual figures." (R. p. 617.)

Mr. Perkins said that in fixing any particular rate, they (traffic men) can not bear in mind the cost because they do not know the cost, and can not bear in mind the profit because they do not know the profit.

Mr. J. M. Johnson, Vice President, in charge of traffic of the Missouri Pacific and Iron Mountain railroads, is the head of Mr. Perkins' department. Mr. Perkins testified that Mr. Johnson was an experienced man in traffic and rates; then this testimony, given by Mr. Johnson in another litigation, was put before Mr. Perkins:

Q. Mr. Johnson, in your experience as a traffic and freight man, have you studied the cost of the movement of the different classes of freight, and the different kinds of tonnage, in determining what would be a reasonable rate in the handling of different classes of traffic, and are not railroad rates based on the assumption that they make a fair return on the cost of the movement of that freight?

A. It is very difficult to determine the cost of moving any particular commodity any particular distance. In fact, it might be said to be impossible to do it. We can only figure in a very general way. We know about what it costs to move a ton of freight one mile, at the end of a year, and we know what we have received for moving a ton one mile.

Now, that is on the business as a whole, which of course, is made

up of hundreds of thousands of different shipments. It is impossible to know the exact cost of moving one ton of any particular class of freight for any particular distance.

Q. But in making the rates, is the general average of cost of moving a commodity taken into consideration in fixing a rate that will be compensatory in the moving of any particular commodity? I refer to the general average of cost you have spoken of, as shown by your records at the end of the year.

A. No, sir; rates are not made that way. By experience we have some knowledge of about what we ought to have for the service in question.

Rate-making, as a general proposition, is largely a guess; and the railroad people claim that by experience they are very much better able to guess correctly than the other fellow.

There are so very many factors entering into the cost that it is impossible to determine the cost of moving the different classes of freight. And we can only determine in a general way, from experience, about what is fair and compensatory." This Mr. Johnson verified the complaint in this case. (R. p. 71.)

Mr. Perkins was questioned as to whether his views coincided with his superior upon the question as to how rates were made, and it was found that they differed considerably, as could readily be seen from Mr. Perkins' previous testimony, showing his views of their method of creation. (R. pp. 650-653.)

The whole of Mr. Johnson's testimony given in the other case was later put into evidence by the State and is found at pages 1603-1610.

Mr. F. O. Becker, Chairman of the Western Classification Committee, and Superintendent of the Western Railway Association Weighing and Inspection Bureau, is a witness of importance. His testimony begins at page 738. He said that his committee has jurisdiction, generally speaking, of the territory west of the Mississippi River; that the purpose of his association is to classify all freight, offered for transportation, which is done as a basis of rate-making by railroads, and that, primarily, the committee first takes into consideration the density of an article; because the lighter and more fragile the more it costs to handle and transport it. Secondly, the value; the greater the value, the greater the element of risk, which also enters into the cost of handling and transporting. Thirdly, the character of risk, susceptibility to damage; the volume—the weight per cubic foot, or the matter of cubic feet per hundred pounds, plus the value per hundred pounds, makes what we call "a unit." And, taking the several hundred commodities, for instance, rated in the classification as "first class," we have found the first-class unit to be approximately 20.61. The other classes range downward from that.

Q. That figure you gave, 20.61, is a kind of a base, is it?

A. Yes, sir; just a basis which we first consider. There may be other conditions subsequently entering into the consideration, but primarily we consider the density and the value.

He says the cost of transportation, including transportation service and handling and the risk incident to the transportation, enter into the consideration of the committee in the classifications made by it. He tells interestingly of the work of the classification committee, which sits as a kind of court of appeals among railroads and shippers. (R. p. 739.) On cross examination Mr. Becker was asked how they got the cost of service, this element which he said was always given consideration, and he answered:

"A. We know that it costs to transport; what it costs to handle; that the element of risk necessarily enters into the cost. We, of course, do not know the total cost; but all of these are factors in the total cost.

Q. You have no basis of cost?

A. I hardly understand what you mean by "basis."

Q. Do you use the ton per mile as a basis in ascertaining the cost of a given line of road, or through a given country?

A. Oh, no, sir.

Q. You do not give any consideration to that?

A. No, sir.

Q. You know that railroad companies prepare statistics of their cost per ton per mile?

A. I believe they do. That is not in my line, but that is my understanding.

Q. But your Western Classification Committee does not use those statistics in making its classification?

A. No, sir.

Q. You know that this element of risk exists, and you bring to bear your experience and your observation on that; is that a fact?

A. Yes, sir.

Q. You have no actual figures on that?

A. Yes, sir; we take the aciduous carboys, for instance, and we know, of course, there is great liability to damage and subsequent loss to other freight.

Q. What I mean is, you do not have the cost of carrying those acids in carboys. You do not know what it costs to carry that particular commodity, do you?

A. No, sir; not definitely.

Q. You know it is very liable to injury and easily broken and you put a high rate on it?

A. Yes, sir." (R. p. 741.)

He states that his committee makes no rates; that it makes the classification upon which rates may be fixed, but that this classification has many exceptions made by railroads in different parts of the country. He says that the Western Classification is generally

accepted by State Commissions, although there are quite a number of exceptions; that each Commission in the Western States has its own classification, but they are largely based upon the Western Classification, but they contain many variations. (R. p. 741.) There are other classifications besides the Western, the Official and the Southern. The classifications are not the same in the Southern or the Official and Western. The ratings are different in each of these classifications; that the traffic is more dense and the rates are lower, but, generally speaking, the classification ratings are similar. Relatively they should be approximately the same. The Western Classification covers a large territory where there are many different local conditions, and that makes the exceptions necessary. (R. pp. 474-475.) The conditions in Arkansas and Nebraska are quite different; that in fact there is a greater difference in different parts of the Western Classification Committee territory than between the Official and Southern Classification so far as the aggregate charge is concerned, but so far as the relation between the different committees are concerned he thinks not. He says that the Texas Commission has worked out a classification of its own and its own exceptions to the Western; that in the interstate tariffs there are exceptions to the Western Classification in the nature of commodity rates. He says that commercial and competitive conditions make these necessary. He says that the traffic moving through Arkansas to Texas would be governed by the exceptions to the Western Classification made to meet the Texas conditions. (R. p. 742.) Further, Mr. Becker said:

Q. Does your committee give consideration to commercial and competitive conditions also, in making classifications?

A. More or less; not to the same extent, of course, that governs in the commodity rating. You know our classification governs over quite an extensive territory and there might be local conditions that would make it necessary to except to that classification. He says that there is a distinct relation between the rates made by the Texas Commission and the interstate rates governing to Texas points. (R. p. 744.)

He further says:

Q. I do not understand you to have stated that your classification is based on a knowledge of the actual cost of transportation of the several commodities embraced in the classification. I understand you to mean that it is made relatively with reference to the cost of the article you are dealing with?

A. Yes, sir.

Q. That you are able to determine, in the way you spoke of, by comparing the density, bulk, weight, the value and those qualities that pertain to the articles that enter into your classification?

A. Yes, sir.

Referring to the relation between the rates made by the Texas

Commission and the interstate rates to Texas points, he said: "That is on account of commercial conditions." Concerning the large volume of traffic through Arkansas from St. Louis to Texas, he says: "It will be governed largely as to both classification and rates by the classification or rates put in by the local authorities of Texas. (R. pp. 745-746.)

This was the substance of all the plaintiffs' evidence on this phase of the question.

(2) THE RELATION OF THE RATES TO THE COST OF SERVICE.

The Defendants' Evidence.

(a) On this issue the State presented Mr. J. C. Lincoln, Traffic Commissioner of the Merchants' Exchange, of St. Louis; Asa R. Bragg, Manager Merchants' Freight Bureau, of Little Rock; Mr. C. B. Bee, Rate Expert for the Corporation Commission of Oklahoma; Messrs. Wilmering, Ludlam, Hamilton, Lewis and others touched also upon this issue and part of their testimony may be profitably read in this connection.

As against the rate experts for the plaintiffs, Flippen, Perkins and Watson, we present equally qualified rate experts, Lincoln, Bragg and Bee; and the latter fortified in their positions from many angles.

Mr. James C. Lincoln is Traffic Commissioner of the St. Louis Merchants' Exchange. His testimony begins at page 961. He was in railroad service from 1876 to 1906, when he left the position of Assistant Freight Traffic Manager of the Missouri Pacific and Iron Mountain System to take his present position. He thus states his experience:

"A. My original work was that of a general utility boy around headquarters. I was then in the office of the Superintendent of car service and from that in the office of the Master of Transportation; then in the General Freight and Passenger office as chief clerk. That, however, was in my association with the St. Joseph & Denver City Railway, now the St. Joseph & Grand Island Railroad, which company I left in September, 1888, to accept service with the Missouri Pacific Company.

I served the Missouri Pacific Company at Atchison, Kansas, for one year, in charge of their Central Branch and their Nebraska Division, in the Traffic Department. I then came to headquarters and served through the various offices from Assistant Freight Agent to Assistant General Traffic Manager.

Q. Was the St. Louis, Iron Mountain & Southern a part of the system that you served?

A. Yes, sir.

Q. Are your duties in your present position such as keep you in touch and familiar with the rates prevailing in the Southwestern country?

A. Quite generally; yes, sir. I have to keep in touch with the general rate adjustment to this entire section. I have to watch the adjustment from other markets in competition with St. Louis.

Q. In what year did you leave the railroad service?

A. In May, 1906."

Mr. Lincoln says:

"The controlling factors in the making of rates, State or interstate, or the foundation upon which a rate is made, is the maximum rate allowed by law, either State or interstate, or on through business the combination of State rates. They are departed from as commercial conditions require."

Then he was asked:

"What consideration in the making of interstate rates is usually given to the cost of actual service performed in transporting the traffic under the given rates?"

A. Very little consideration is given to the actual cost of service in making rates. Rates are made generally, as said, upon competition or commercial conditions. The traffic man necessarily should be informed to a greater or lesser extent as to what it costs, but in the making of any individual rate he is unable to determine what is the cost of handling that individual traffic.

Q. What information or statistics do the railroad companies have before the traffic men when they make rates; that is, as to cost?

A. Well, there are all kinds of statistics that reach a traffic man, or the traffic man can avail himself of them if he wishes to—as to the movement of the tonnage, the various commodities making up the tonnage, car movement and the averages. The ordinary traffic man is not well versed upon the expense of conducting the transportation as to any commodity on any division, but deals in totals.

Q. In fact, there are no statistics made by the railroad companies operating in this immediate section of the Southwest that have the cost of transportation of any given commodities, are there?

A. Not that I know of. I never saw them.

Q. In your experience you did not meet such?

A. Not such statistics.

Q. In fixing rates from large distributing points, say St. Louis to Arkansas, and through Arkansas to points beyond, say New Orleans and the Texas common points on the other side, how largely, if at all, does the cost of the length of the haul from Arkansas points to New Orleans and to Texas common points determine the rates that are fixed for these various movements?

A. Except in a very remote way, consideration is not given to the expense of conducting the transportation in making the rates from St. Louis to New Orleans, from St. Louis to Little Rock, or from St. Louis to Texas points. (R. pp. 962, 963.)

He was asked as to how he would divide expense, State and interstate, and said he had some opinions on the subject, but had never

worked them out, and therefore did not care to go into that matter. He was asked:

"Are there any controlling factors in the difference of the service, State and interstate, or the difference in long hauls and short hauls?"

A. That is in connection with expenses?

Q. Yes.

A. In connection with the expenses of conducting transportation there are controlling factors in the way of terminal expenses. There are controlling factors in the way of these short hauls being more expensive than the long hauls.

Q. How is that taken care of in practical railroading?

A. In the adjustment of rates.

Q. The evidence in this case shows this—I will just speak in round figures—that the revenue per ton per mile on the State traffic is 12 mills and the revenue per ton per mile on the interstate traffic is 6 mills.

Do those statistics indicate to your mind that this extra cost for short hauls have been taken care of in the rates?

A. This would indicate to my mind that in a measure the short haul has been taken care of in the rate by the fact that the average rate per ton per mile is higher than for the longer haul.

Q. And that is the way, as I understand you, in which this extra cost of the short haul, terminals and so forth, is taken care of?

A. It is contemplated in the rate adjustment, taken care of by the higher rates, for the shorter hauls than for the longer hauls. (R. pp. 963, 964.)

On cross examination he testified:

"Mr. Lincoln, you think the length of haul affects the expense of conducting traffic, do you not?"

A. Unquestionably the longer the haul the less the cost should be per ton per mile.

When he was asked the cause of that, he said:

"The causes are the continuous transportation over divisions and that after freight is in movement it would be hauled greater distances without a progressive rate of expense for each mile hauled.

Q. There are two classes of interstate traffic: From one State into another, say adjoining States, and that which crosses States. The latter kind has been termed "transstate" traffic in this case. A movement may originate in St. Louis and terminate in Galveston and it is a transstate shipment in Arkansas because it has no origin or destination there.

To what extent does that enter into and affect the relative cost of transportation as between interstate, including that interstate on one hand and intrastate on the other, in the State of Arkansas?

A. Well, I would say this: That business can be conducted with less expense, which is the average shown by the result in the rate per ton per mile for the longer haul from St. Louis to Galves-

ton than for a short haul within that distance, passing over the same line and in the same direction.

Q. Is there any other element that, in your opinion, would enter into the relative difference in expense than the long and short haul?

A. All things being equal, no.

Q. What is the service rendered with relation to transstate traffic and interstate traffic, in the more limited sense that I explained a while ago, in the State of Arkansas?

A. What is the relative service as between transstate and the interstate?

Q. Yes; in the State of Arkansas.

A. Well, within the State on State traffic, terminal expenses are embraced in the rates.

Q. On what traffic?

A. On the intrastate or short haul traffic. The same terminal expenses are embraced on an average of a long haul. The continuous movement of freight for a long haul enables—when there is a volume of business to move—the conduct of that business cheaper than the short hauls, because the short haul is usually handled in local trains.

Q. Will you charge any terminal service on a transstate shipment to the expense of conducting traffic in Arkansas?

A. No; there should be no expense charged in Arkansas for the terminal service.

Q. When you say there is a terminal service, you mean the traffic itself requires a terminal service?

A. Yes, originally; there would be no terminal service on through business.

Q. How would it be in interstate traffic as distinguished from transstate from St. Louis to Little Rock?

A. There would be one service there in the State and one there out of the State.

Q. How is it usually in State business?

A. There are two terminal services in these States.

Q. Is there any material difference in the expense of conducting intrastate and interstate traffic, referring now to the State of Arkansas, without having to repeat that each time?

A. No.

Q. You think there is no very material difference in expense?

A. In handling State and interstate business?

Q. Yes.

A. No, sir.

Q. On what do you base that view, Mr. Lincoln, that there is no material difference?

A. I base that view upon the fact that an imaginary line does not increase expense. I support the proposition that there is a greater expense attached to the handling of short haul business, State or

interstate, than on long haul business, State or interstate. (R. pp. 964, 965.)

On further cross examination he said:

Q. Mr. Lincoln, when you say, in regard to the cost of service being the large factor in determining the rates, you mean in determining the details, don't you? You do not mean that a railroad could operate unless it could fix its rates with some reference to the cost of the service?

A. I say that the cost of the service is not the factor that controls the making of the rates. The results of operation necessarily, as to the revenue, you would have to have some regard to cost or you would go into the hands of a receiver.

Q. That is what I want to know.

Could a railroad be operated successfully if its rates were fixed without any reference to the cost of the service it rendered to the public?

A. If it absolutely disregarded it and handled its business without regard to cost of the service, it would either have to get a receiver or raise the rates.

Q. When you speak of the disregard of the cost you mean in fixing particular rates?

A. Yes; the particular rates, though, do not take into consideration to any great extent the cost—

Q. But you would not say that railroads are not governed by the same rules that all other industrial institutions are governed by, would you?

A. I say if they do not govern themselves by the same rule, they ought to.

Q. Are they not governed by the general and universal law which is necessary in manufacturing or industrial concerns, to so fix their prices that they would not be under the cost of production?

A. It should.

Q. Would not a railroad that disregarded it, be in the hands of a receiver?

A. Well, it has not done it. (R. p. 760.)

Without going too much into detail, this part of the cross examination is instructive:

Q. How are the rates adjusted from St. Louis and Little Rock, as compared with the adjustment to Benton, Malvern and Arkadelphia, three points on the main line below Little Rock—how are they graduated?

A. I have not studied those rates lately, but I was of the impression that the rates were made to points south of Little Rock by adding the rates out of Little Rock to the Little Rock rate.

Q. In that case length of haul controls?

A. The length of haul south of Little Rock and the measure of rates control that.

Q. Take a shipment from St. Louis to Memphis, which you said on first class was at the rate of 70 cents and to New Orleans a rate of 90 cents—

A. I think those are the figures.

Q. Why is the rate 20 cents higher to New Orleans than it is to Memphis?

A. The rates made from St. Louis to New Orleans and to Memphis are made as against water competition. I presume they could get more money to New Orleans than they could to Memphis. They had boats running in the old days—they do not have them now—from St. Louis to Memphis. We also had boats which operated through St. Louis to New Orleans.

Q. Is it not a fact that the distance from St. Louis to those two places is a factor in fixing those two rates?

A. I do not think so at all, because intermediate rates this side of New Orleans are higher than they are to New Orleans.

Q. What is the intermediate rate to Jackson and Meridian, as compared with Memphis?

A. I do not recall, but it is higher than from St. Louis to New Orleans, the rate from St. Louis to Jackson and Meridian, although the traffic moves through Jackson and Meridian to get to New Orleans.

Q. That establishes the proposition that this disturbance produced by these exceptional conditions is confined to the point where the exceptional condition exists, and does not affect the intermediate rates.

A. I say there was a commercial or competitive condition that required a departure from the mileage scale.

Q. As to New Orleans?

A. Yes, sir.

Q. But does not affect the intermediate points like Jackson and Meridian?

A. Not to the same extent; to some extent, but not to the same extent. (R. p. 978.)

The operation of the Western Classification was also touched up in Mr. Lincoln's cross examination:

Q. Are you familiar with the ratings of the Western Classification Committee?

A. Yes, sir.

Q. Do you know the classification they make for the various commodities moved?

A. They divided them into ten classes.

Q. Do they have any regard or pay any attention to the character of the articles transported with reference to the cost and the risk that enters into the service in reference to the particular classes that are defined by them?

A. They consider a great many things in the development of the

proper rating to be applied. The cost, the risk, the density and the volume of the traffic.

Q. They take all of those things into consideration, do they?

A. They do; by intuition, if not directly.

Q. Why is it that they would classify an article of small value and little density, weight, etc., lower than they would an article of greater value, that did not have so much density and was lighter?

A. To distribute the proportion so as to make the commodity as nearly as possible contribute its share toward the total revenue of the road.

Q. And they have in mind the cost of handling those different classes of commodities?

A. Those are all factors that should be taken into consideration.

Q. Does not this Committee do that?

A. Very largely.

Q. Does not the classification on its face show that?

A. As a whole it shows very good judgment.

Q. Take an article that is very valuable and fragile, easily broken, that would involve a heavy loss and damage claim; they are likely to put a higher classification on that than on one that is less likely to be broken?

A. The classification is the best prepared document of the relations that should exist between the different commodities. The classification shows the relations that should exist, not the rates." (R. p. 981.)

In re-direct the subject came up again:

"Q. Speaking of the Western Classification of commodities as the basis of fixing rates, do not the railroads in the interstate tariff make many exceptions to that?

A. A great many, State and interstate.

Q. Both State and interstate. The State Commissions make exceptions and the railroads make exceptions?

A. Yes, sir. (R. pp. 982, 983.)

As to the movement of commodities in interstate on distance scale tariffs, or on competitive rates, this statement is important.

Q. Mr. Moore has asked about a great many rates which he has called "exceptional" rates, like these New Orleans competitive rates; zone rates and things of that kind that are excepted from the distance scale:

I will ask you, as a general proposition, whether the traffic most largely moves under these competitive rates or does it move under the distance rates?

A. It moves under the competitive rates.

Q. They constitute the larger volume, these rates Mr. Moore has been discussing with you, as based on competition conditions, river conditions and things of that kind?

A. A larger volume moves under competitive rates." (R. p. 983.)

Mr. Asa R. Bragg's testimony begins at page 816. For five years he has been manager of the Merchants' Freight Bureau of Little Rock; his duties are really those of a traffic manager for the merchants and manufacturers of Little Rock. He has to get them rates, see that they are protected against other jobbing centers and manufacturing places in the matter of freight rates, and act as their agent so far as traffic is concerned. Prior to his present position he was in the Traffic Department of the Iron Mountain road for 25 years. His service was from local freight agent to division freight agent.

He was Division Freight Agent at Little Rock for 15 years.

These excerpts from Mr. Bragg's testimony are pertinent:

"Q. I wish you would state from your knowledge and familiarity with the freight rates prevailing in this country, the manner or system on which they are constructed?

A. You mean the method of making rates?

Q. Yes.

A. Well, they have two methods—one is by conference among themselves; that is, with reference to competitive rates; the individual or local tariffs, I think, are made up in their offices, by their rate people.

Q. Their competitive rates are made in conference?

A. Yes, sir; altogether; they are promulgated by a chairman or agent.

Q. You are referring, I presume, to the interstate rates?

A. Yes, sir.

Q. Prior to the adoption of a Commission tariff, how were the State rates made?

A. They were made in practically the same way; they didn't, however issue—their tariffs were not—I don't think their tariffs into Arkansas were issued by a chairman, not all of them, some of them were, and some were not; some of the tariffs even to competitive points were not issued by a chairman.

Q. Prior to the Commission rates were there any what was known as jobbing rates, to commercial centers in the State?

A. Yes, sir; between certain points; that is, from jobbing centers to local territory, what is known as noncompetitive points." (R. pp. 816, 817.)

It was shown by him that prior to the Commission Tariff that special rates and jobbing rates were the rates upon which practically everything in Arkansas moved, and the issuance of the Commission Tariff in 1900 abolished all these rates and put the intrastate traffic on a mileage scale. (R. pp. 817-819.)

Then he explains the much-mentioned "Memphis Adjustment," which briefly was this:

The Little Rock & Memphis road, now part of the Rock Island, adopted the Commission Tariff out of Memphis by practically placing Memphis on the west bank of the river. The Iron Mountain pro-

tested, and it was a year and a half before the Iron Mountain adopted the Commission Tariff for its Memphis business. Its adoption was brought about through a suit between the city of Memphis and the Iron Mountain over franchises (other witnesses say terminals), and an agreement was made by the Iron Mountain, in consideration of the franchises (or terminals), to put in force from West Memphis the Arkansas Commission Tariff. This was in 1902. (R. pp. 819. 820.) In cross examination it was brought out that in consideration of the vacation of certain streets and alleys, the Iron Mountain agreed to forever maintain the same scale of rates from West Memphis that were maintained in Arkansas. (R. p. 839.)

Mr. Bragg was asked to make an estimate of the amount of interstate traffic which was affected by this Memphis adjustment. He says that no part of the transstate traffic was affected by it. Exhibit 26 (R. p. 2391) of the Iron Mountain shows transstate traffic to be 51.16 per cent total ton miles, interstate 40.69 per cent and intrastate 8.15 per cent. He estimates that of the remaining 41 per cent (erroneously put to him in question as 49 per cent) that not over 15 per cent was affected, and gives definite reasons for his estimate. (R. pp. 823, 824.)

Assuming for the moment that the Commission Tariff is iniquitous and confiscatory, the Iron Mountain voluntarily adopts it for 6 per cent of its total business in the State—15 per cent of its strict interstate business—in order to get a franchise or terminals in Memphis, and then seeks to enjoin it on account of 8 per cent (the intrastate) of its traffic, because it is confiscatory.

This evidence, however, is not directed to that point, but to show that cost of service was not regarded in putting in rates for Memphis traffic, but other considerations controlled.

Mr. Bragg explained the fundamentals of the rate situation in Arkansas as follows:

"A. Well, away back twenty-odd years ago, they fixed—the St. Louis, Iron Mountain & Southern Railway Company into Memphis, and the Frisco, or the Kansas City, Springfield & Memphis, as it was at that time, fixed a differential basis between St. Louis, beginning—really it began at the Missouri River, and came on down and came to New Orleans; all these rates were predicated on the Memphis basis, St. Louis was 30 cents, Cairo was 20 cents over Memphis, and St. Louis was 30; in other words, the St. Louis basis was fixed first, and Memphis was fixed at 30 cents per hundred; we are using one class as an illustration, under the St. Louis rate; they went on down below and made the New Orleans rate the same as St. Louis. I am speaking of rates over the line into Arkansas, interstate rates.

Q. Let's get that a little more clear; the Memphis rate was fixed at 30 cents, using one class as an illustration?

A. No; St. Louis.

Q. What was New Orleans fixed at?

A. At the same as St. Louis. If St. Louis was a dollar to Little Rock, it would be 70 cents to Memphis, and a dollar to New Orleans; Kansas City was 10 cents higher than St. Louis; those differentials applied all the way down, and were the basis then and are today the basis of fixing the rates to Little Rock from that territory.

Q. How was that arbitrary or differential arrived at? Was it based on the cost of service or commercial conditions, or what was it based on?

A. No, sir; it is a system that obtains all over the country, and it is used—it is an arbitrary made by traffic people. If they get together and they find that two rates added together are against the movement of traffic generally, they fix a basis for making a through rate; for instance, from Chicago, Cincinnati, Louisville or Pittsburg, or from any point beyond the river.

Q. Are those arbitraries or differentials determined by differences in costs in moving that commodity or are they determined by other considerations?

A. The cost, I don't think, enters into the basis of making those rates.

Q. What does enter into it?

A. The territorial location is largely the reason for it.

Q. What you might term commercial, competitive and geographical conditions?

A. Yes, sir.

Q. Trade conditions?

A. Yes, sir; in all those rates, I presume, they tried to keep all markets on a parity as far as possible.

Q. That is the object of these arbitraries, to keep these various markets on a parity?

A. Yes, sir; that is the only object; of course, the cost of doing business, I presume, is thought of, at the time these rates are made.

Q. Is it any more than thought of?

A. That is all.

Q. Is there any data before them by which they could act upon any more than thinking about it?

A. I don't think so; I would like to explain a little further about this basis; it is followed very closely in making all through local rates; the same basis; Little Rock is the hub, is the axle that controls the entire rates of this State.

Q. You are referring now to interstate rates?

A. Yes, sir; in making rates out of Memphis and St. Louis to local territory, like Arkadelphia or Malvern, or some of these points down here, they hug pretty close to the same basis, the differential between Memphis, St. Louis and New Orleans, that they do to the common points.

Q. Now, take the rates that have been denominated in this hearing as transstate rates, that is, freight moving across Arkansas that

does not stop in it; for instance, lumber from Louisiana north, from States west to common points, such as fruit, from California to the east, live stock, and various freights that move across Arkansas, without having any destination in the State or originating in the State, what effect, if any, do the State rates have upon those rates?

A. None whatever; you have business from St. Louis to Louisiana and to Texas and to Mexico.

Q. Business passes through Arkansas, without any destination or origin in Arkansas, and for convenience in this case, it has been termed transstate business.

A. I don't think Arkansas rates have any effect on those rates. (R. pp. 820-822.)"

On cross examination as to cost of service, Mr. Bragg says:

"Q. Did you ever know of a business, large or small, that was conducted successfully, in which the output of the business was not sold with reference to the cost of its production?

A. I consider that the railroad corporations in that respect are entirely different from any other kind of business.

Q. Can any business be conducted successfully unless it sells its wares upon a basis that will enable it to make something above the cost of producing it?

A. Of course not.

Q. Isn't that true of railroads, the same as any other enterprise?

A. They are trying to make money, there is no question about that.

Q. Can they conduct their business intelligently with reference to results, unless they fix the price upon what they have to sell with some reference to the cost of producing it; isn't that true just as well with railroads as with any other industry?

A. I don't think so; I don't think they can calculate it very closely.

Q. If the cost of transportation is not an element that is absolutely essential that railroads should consider, must they not consider it if they conduct their business successfully?

A. Of course, they must do that.

Q. You do not mean to say that rates are fixed without any reference at all to the cost of service?

A. About half of them are.

Q. How is it with the other half?

A. I don't see how they can figure a rate at all, on the cost of—

Q. Let me ask you, I believe you said awhile ago that the rates depended upon the classification; does the element of cost enter into the consideration of those persons who are charged with the duty of making the classification?

A. No, sir; in a general way, they make these classifications—they are inconsistent; they will classify a commodity, one of the

very cheapest commodities, perhaps, which costs the smallest sum to handle, they will put it away up in a high rate. (R. p. 846.)

He was cross examined at length in regard to the Western Classification, but nothing developed different from the statement given.

In re-direct he was asked:

Q. Now, I understand, your testimony about the classification is that, while the committees are supposed to take into consideration bulk and space and value and risk and things of that kind, that the result of their work is full of inconsistencies where those considerations are ignored. Isn't that about the effect of your testimony about that?

* * * * * * * * *

A. That has been my experience.

Q. You have had pretty intimate experience with the Western Classification, too, have you not?

A. Yes; I have been handling it a long time.

Q. Mr. Moore brought out that you had been attending some meetings of the Western Classification. Did they give you a hearing on your matters?

A. No, sir.

Q. Kind of a hard crowd to get in to?

A. Well, it is usually out horseback riding and a few clerks do the work.

Q. Have a pretty good time down there, don't they?

A. Yes; they usually do. Incidentally a few games of poker.

Q. Are those meetings attended very generally by the intrastate shippers?

A. Oh, they are always besieged principally by manufacturers and people who are sometimes merchants—generally manufacturers, though.

Q. Men that have very large shipping interests go down and have their meetings with them?

A. Well, they go down there and apply for changes in weight or rate or something of that sort.

Q. They go there and discuss changes in weight or bulk and the rates as it refers to manufactured articles?

A. The rate; that is, the Classification sometimes fixes the weight or rate on manufactured goods that become prohibitive, perhaps, or with some other point that has the same goods possibly in a territory covered by some other classification. They are getting around to as nearly perfect as they can. It is a good deal better than it used to be." (R. pp. 853, 854.)

Mr. C. B. Bee, Rate Expert of the Corporation Commission of Oklahoma, testified at great length on rate subjects principally, but his cross examination carried him into almost every subject connected with the case. His testimony begins at page 1176.

He is in charge of the Rate Department and has been for three years past.

His duties are to advise the Commission as to rates in effect in different States of the Southwest, and the interstate rates in effect in the Southwest, and the conditions governing freight rates, and to assist the Commission in making freight rates to govern shipments in Oklahoma and generally the handling of the rate situation in Oklahoma. (R. p. 1176.)

At the time he was selected as Rate Expert for the Commission he was acting as Assistant General Freight Agent of the Mexican Central Railway Company. All his railroad experience had been on Mexican roads and he gives this sketch of his work before going with the Corporation Commission:

"I started in as stenographer to the division superintendent, his office stenographer; promoted from that to car stenographer; and through the different positions in the superintendent's office, such as overcharge and damage clerk; chief clerk; and then on the road with the superintendent as handy man, going where he directed; from that to the motive power department with the assistant superintendent of machinery, and numerous positions in the motive power department; my last service in that department was balancing power; and I was transferred to the freight department, holding all the positions in the freight traffic department up to acting as assistant general freight agent; that is, commercial agent; all the rate positions—first, second, third and fourth rate clerk; chief rate clerk; chief clerk of the rate department; commercial agent; division freight agent; general agent and back into the office." (R. p. 1176.)

Mr. Bee's views are found in answer to these questions:

"Q. I will ask you what relation interstate rates prevailing in the Southwestern territory, particularly in Arkansas and Oklahoma, that you are familiar with, bear to the cost of the service, and what consideration is given in making interstate rates, to the cost of service for work done?

A. Other than a fixed figure which has sometimes been recognized in railroad rate making, I have never known of the cost of service entering into the making of a freight rate; that fixed figure has now been discarded, entirely by all traffic officials; it was the old bugbear of five mills per ton per mile, which was for years considered the actual cost of service on long hauls. That figure has been dropped, and no traffic man at present uses it, and freight rates are not made on the cost of service.

Q. What considerations govern the making of interstate freight rates?

A. All the traffic will bear.

Q. Explain just what that means in rate-making parlance?

A. It takes into consideration the commodity of the traffic, the value of the commodity, the points between which it is moving, the competitive conditions surrounding the movement, and, of course, regard is given in all instances to the nature of the commodity, and

that is the nearest that a traffic man ever comes to the cost of service; the rates on a low value commodity, and one which will suffer very little from damage, are considered low grade commodities, while the reverse is true on high grade commodities; no traffic man would consider the same rate on oil as he did on sand, but he would not be attempting to place the cost of service upon the two, but rather the liability, and the rate that the two commodities would stand.

Q. That is, the relation of one commodity to another?

A. That is it exactly.

Q. That is best expressed in the classification of commodities, isn't it?

A. That is true; the classifications as published today largely govern those things.

Q. But even those classifications are full of exceptions, are they not?

A. Yes, sir; and made largely upon guess work.

Q. Are the exception sheets to classifications prevailing in Oklahoma?

A. Yes, sir.

Q. Are you familiar with the exceptions sheets prevailing to the Texas common points?

A. I am.

Q. Is that large or small?

A. Very large.

Q. Are you familiar with the exception sheets prevailing in Arkansas traffic?

A. Yes; both State and interstate.

Q. That puts another variable quantity into the rates, doesn't it?

A. It does." (R. pp. 1178, 1179.)

* * * * * * * * *

Then Mr. Bee takes up the subject of zone or flat rates on lumber and grain particularly. (R. pp. 1179, 1180.) Mr. Bee explains the movement of cotton. It is delivered to the railway company and by it carried to a compress point, then held on cars till ordered compressed; delivered to the compress, unloaded by the railway company; again taken from the compress when compression completed; loaded again by the railway company, and hauled to final destination. It is treated as L. C. L. throughout its entire movement; the rate is based on bales..

Its first movement from point of origin to compress point is billed on a local rate, but, when forwarded to its destination, the rate from point of origin to final destination is charged and the local rate refunded, or the difference refunded. The entire movement is interstate and all the cotton moved in Arkansas (excepting an infinitesimal amount) is shipped out of the State. (R. p. 1181.) He says that

cotton is the most expensive commodity handled by a railroad company, and these are his reasons therefor:

"I think it entails great expense and more liability upon the railroad company than any other commodity handled, and the reason is that it requires a large force to load and unload. As a rule, cotton is loaded at small stations where there is but one man employed; it is necessary to bring the section foreman into that station to load that cotton on, else employ people there in the town to load it. Oftentimes, railroad companies pay the owners of the cotton to load it for them. Care must be taken to get a perfect car in which to load this cotton. After it is loaded, railroad companies by their rules require that the doors be batted, which requires an additional expense, and this batting is always thrown away at destination, unlike grain doors, which are returned. This cotton must be placed in the yards at the compressing point, and it is a very unusual thing, during compressing season, if there is not an extra switching engine at all large compressing points; as cotton is not handled upon its arrival at the compressing point, but the people who own it hold it, and there is no way for the railroad company to tell what car is next going to be called for. I have seen as high as five hundred cars of cotton laying in a yard, and some of them would be there twenty and some thirty days, some only three days, and every time a car is called for, it generally means the switching of that entire cotton yard to get that car out and switched to the compress. Demurrage and storage has not been charged on cotton heretofore; it is now, in order to do away with this extremely heavy expense. After cotton is moved to the compress, it is again put back in the car, the same process being gone through with. In the cotton countries in our State, some railroads equip their engines with oil burners, in order not to throw sparks. They haul oil a long distance and do not handle oil on other branches of their road; it is merely to protect this cotton. Cotton moving from point of origin to the compress point is in big bales, and I think it requires about 2½ to three cars of open cotton or flat cotton to make one car of compressed cotton, so that there is that many cars moved into the compress which must move back empty for other cotton, and the liability on the cotton is very strong; it is always loaded at shipper's count at blind sidings, sealed after he closes the doors, seldom counted by the agent; fires have often been known to occur where there was a question as to whether there was a bale of cotton in the car at all."

Q. What is the casualty rate on cotton?

A. High, exceedingly so; once a fire starts in a bale there is no telling when it will stop, or when it will be discovered. (R. p. 1180.)

The rates on cotton are thus explained:

From Oklahoma there is a flat rate of 70 cents into the New England States.

From Little Rock it is 80 cents, and from Fort Smith 85 cents.

This is to the New England mills. Most of the railroads in New England participating in the rate, and applies generally in New England irrespective of distance. The 80-cent rate from Little Rock would apply from that point and for some distance around it; and this flat rate is divided between the various carriers, irrespective of number of carriers. (R. p. 1183.)

He also explains the citrus fruit flat rate. A train of oranges from California to New York will be carried, after it gets east of Colorado, on a flat rate. A car dropped at El Paso, Texas, at Houston, Texas, at Texarkana, at Little Rock, at St. Louis, at Pittsburg and at New York each pay the same freight.

"There would be a haul in there of approximately a thousand miles, over that, between the Little Rock car, the New York car, and if the New York car was pulled on the cost of service, there would be an exceedingly high profit made out of the Little Rock car, or *vice versa*, somebody would lose money in carrying that car to New York." (R. p. 1184.)

The Texas common point rates are explained:

"Q. There is a map there on Texas common points?

A. I am thoroughly familiar with that.

Q. State the effect on the revenue of shipments passing through Arkansas under that Texas common point schedule?

A. The conditions could be so changed on two carloads of freight of exactly similar commodities, loading from a given point of origin, to separate destinations in Texas that the revenue received by the lines participating in the business would be almost double on one car what it was on the other. That Texas common point rate applies from the north to the south, and from the east for a long distance west; the highest distance between two points being 662 miles, in what is known as common points territory.

Q. That is at the Texas end of it.

A. Yes, sir; I think that is the highest distance; I figured it out the other day for the Interstate Commerce Commission.

Q. How would that result be brought about?

A. The result would be brought about by two shipments originating at St. Louis, the cars being loaded with identically the same commodity, one being destined to Texarkana, Texas, instead—take to the first point in the common point territory of Texas—I believe there are two stations in Texas (referring to map). Take two shipments originating at St. Louis, handled over the Iron Mountain, one destined to the first station in Texas, on the T. & P. Railroad south of Texarkana or west of Texarkana, the other being destined Big Springs, Texas, which appears from this map to be the end of the common point territory. The distance between those points is in excess of five hundred thirteen miles, and the rate would be exactly the same. Dividing the rate by the miles handled, figuring in mills per ton per mile, it would show a figure nearly one-half for the car

destined for the last station as for the car destined for the first station. The exact figure would be easily worked out. In other words, the haul on one would be something over 513 miles more than on the other, and the rate would be the same per hundred pounds.

Q. What effect would the distribution of that rate between the different carriers in Texas, have upon the matter?

A. The other carriers in Texas would receive a part of the rate.

Q. Within that Texas zone would there be different carriers handling this commodity?

A. Yes; you can figure rates from defined territory to Texas points that would require the handling of three or more carriers to deliver the shipments. (R. p. 1185.)

If this freight movement originates east of St. Louis a similar condition exists. The longer the haul, however, the less disparity. Take Grand Glaize, Ark., the last point in the defined territory to the first point in Texas taking the rate, and it would be about three times as much as for the longest haul. Pittsburg is the eastern limit and a group surrounding Pittsburg take Pittsburg rates, a group surrounding Chicago take Chicago rates, etc. A shipment of steel from Pittsburg to the farthest common point, Big Springs, Texas, would be carried by as high as ten or twelve carriers, or as few as three or four, depending on the routing, but generally about six carriers; this flat rate would be divided between these carriers, whether three or twelve. In its passage through Arkansas the freight to Texas common points would usually be handled by four or five lines and a fluctuating condition of the revenue apportioned to Arkansas for almost every shipment, although the cost would be the same." (R. p. 1186.)

The water competition fixing rates is discussed by the witness. Owing to it there are rates from St. Louis to New Orleans less than to Little Rock which they have under the cheaper rate right through Little Rock to New Orleans. Many of these rates are based on a theory of water competition where none exists. (R. pp. 1187, 1188.)

In the Southwestern country some of the States have combined Commission, legislative and voluntary rates; this is true of Kansas and Oklahoma. Some have all Commission-made rates, Texas and Arkansas; Missouri, Louisiana and Mississippi have partly Commission-made and party voluntary. State rates are strictly arbitrary, mostly on a distance scale. (R. p. 1188.)

Each State has either its own classification or adopts the Western Classification, subject to its own exceptions.

"Q. What effect does this variation in the classification that you have just explained, have upon the revenue?

A. It is possible to change the revenue materially by variations in classifications.

Q. In what way; that is clear to your mind as a traffic man, but to the lay mind it would probably require a little explanation of just how it is done.

A. As a sample we will say the first-class rate is 40 cents, and the second class is 30 cents; a change was made in the classification, and the exception would reduce it to second class; it would immediately change the rate from first to second, and would make a change in the revenue of the railroad of ten cents a hundred pounds." (R. p. 1189.)

Regarding the general proposition that the longer the haul the cheaper, proportionately, it can be carried, Mr. Bee makes a statement worth considering:

"I want to add there that the traffic men themselves say, the longer you haul the shipment the cheaper you can handle it per ton per mile. That is a misunderstanding. I don't think any traffic man will go on the stand and say you can haul a shipment 200 miles cheaper the second hundred than the first hundred. But the fact is that by reducing the rate per ton per mile, you are still paying your terminal expense, and the cost of the haul just the same 100, 200, or 300, with the exception of the terminal expense; and of course the longer you have to go you can exact a smaller fraction on each mile to pay that terminal expense with, and that is the only reason that I know of why it costs less to handle the shipment a long distance than a short distance. After a shipment goes over one terminal or one division, it costs just as much to handle it—

Q. You mean the cost per ton per mile?

A. Yes; or the cost as a whole; any way you want it. The terminal expense at origin and destination has to be taken care of, and if you can haul that shipment 500 miles you can take a less figure on each mile to pay those two terminal expenses, than if you are going to haul it only 100 miles. The actual cost of transportation is just the same, if the condition of the road is the same.

Q. Suppose this factor enters into it: Suppose the longer the haul, the more intermediate carriers?

A. That is largely true.

Q. And the rate is thinned out by every division?

A. It continues to thin all the time. A shipment passing through interstate from road to road will stand a heavier terminal expense, right here in Kansas City than it would cost to be delivered in Oklahoma. I understand that the expense there has been figured out at $4.80 or about that.

Q. Do you refer to St. Louis or Kansas City?

A. I meant Kansas City, $4.80 there, from line to line. They have never contended it cost over $2.60 to deliver freight in Oklahoma, at our largest and most expensive terminal we have. (R. p. 1207.)

On cross examination Mr. Bee, after repeating to him the substance of his statements on direct, on the way rates were made, was asked:

"Is the desire to get a remunerative rate the cause of his taking

these elements (the character of the commodity, its value, etc.) into consideration?"

He says to a certain extent he (the traffic man) does, but he can not tell whether it is remunerative or not, but he has to handle the business just the same.

He will not go below the cost if he can help it, but he does not know the cost, but he does the best he can to get a rate above cost except to meet competition; then he does not take it into consideration at all. (R. pp. 1217-1219.)

In making special rates they take into consideration the volume of business. (R. p. 1219.)

He formerly thought that rate men took into consideration reciprocal tonnage in fixing rates, but from experience and observation of the roads operating in Arkansas and Oklahoma he does not think such is the case, and pressed for his reasons he gives numerous instances, the roads and the officers, who refused to make rates on that basis. (R. pp. 1219-1221.)

A full statement of Mr. Bee's opinion on the cost of service may be gathered from this excerpt from his cross examination:

"Q. In view of what you have stated in connection with the elements that are taken into consideration—since you have been discussing this subject this morning—with reference to the effect of value; length of haul; liability incident to the haul, the nature of the commodity; and in view of your statement that those matters are considered by traffic men, although you think they have not the information as to what the cost is, I want to ask if you think it is correct that traffic men do not give any consideration to the cost of service in fixing rates?

A. I think they give very little consideration to the actual cost. Now, understand me. I don't want to be understood as saying that a traffic man is going to solicit a shipment or make a rate on any figure that might come into his head. I don't want to put a traffic man in that light. I don't want to indicate for one moment that any traffic man is that much of an idiot. But I mean, he is not figuring what the cost of service is. He does not know that the cost of service represents six mills for 100-mile haul or eight mills for a 50-mile haul. He has no figures of that kind. He takes a rate and tries to get what he can out of it. He has in his head, probably, an arbitrary figure that he will not go below, but if he was asked tomorrow to testify as to the cost of service, he would be unable to do so. He is trying to hold the business down so his road can get some money out of it. He is taking business and instructing his men to take business which is paying him enough, or he thinks is paying him enough. He considers he has to take it to keep his trains moving.

Q. And you stated a while ago that he could not give the cost of service?

A. Or even approximate it.

Q. In the nature of things, it is quantity that is unknown to him, yet in fixing the rates he regards the cost in so far that he will not fix a rate which is nonremunerative, and he does consider these elements you have mentioned?

A. He would fix that on a new rate and a rate over which he had the power to make it; there is no doubt about that.

Q. That is where the conditions are normal?

A. Where the conditions are entirely in his power. The other might be a condition where he would not have any power over the rate at all. Some one else might have stepped in there ahead of him." (R. pp. 1221-1222.)

The testimony of Mr. Becker, Chairman of the Western Classification Committee, heretofore given, as read to Mr. Bee and he was asked as to his views on the subject and said:

"A. I agree with him, as I said before, that classification is built upon the relation of the cost between the two articles; it is not made on the actual cost of service to handle it, and I don't think Mr. Becker intended that; as between the first and second classes, Mr. Becker is trying, in making the classifications with his committee, to so arrange those two commodities that they bear a relation to each other, but not that they bear a relation to the cost of service, but to each other, and as far as traffic conditions are concerned, the revenue coming from them, he feels that one commodity will stand a higher rate than the other, and it goes in the classification higher, and that is what I think Mr. Becker refers to when he says the cost of service is the basis.

Q. Isn't it also true that traffic men, in making rates, are influenced by the same considerations?

A. To a certain extent they are; yes, sir; not to the actual exact cost of service—I want to be understood at all times, in making a statement that a traffic man or any traffic man takes into consideration the cost of service or the approximate cost of service; that I mean that he attempts it between the two articles only; rates are made upon a comparison entirely." (R. p. 1224.)

Questioned in regard to the rate from the Southern lumber zone, he says he thinks it an unremunerative rate, and his attention was called to testimony that the freight agents of the roads maintaining it had testified it was remunerative, considering all factors, and they figured on the cost of service, and he says: "The freight agent was figuring that on the 22-cent rate he was not making a profit on shipments from the southern part of the zone, but his idea was that what he was making on the northern end of it would compensate him for it, and that he was trying to make some one else bear the burden of it." (R. pp. 1227-8.) (Elsewhere it will be seen that Mr. Perkins' testimony that about 15 per cent of the lumber movement on this flat rate was from Arkansas and the rest of it south of it, therefore the greater part of it was at an unremunerative rate, according to

Mr. Bee's views.) Mr. Bee goes into very specific illustrations to prove his assertions in regard to the lumber rate, not being based on cost of service. (R. pp. 1228-1230.) In fact, the cross examination of Mr. Bee deals largely with specific instances given to illustrate any statement he makes, and, to get the full force of it, it must be read in its entirety.

Mr. Ludlam testified that a rate-maker, as a rule, has no specific data as to the cost of service; he knows in a general way the cost per ton per mile to move freight on his road, but does not know it by divisions.

There is a vast difference in expense of one division compared with another, and this would make a great difference in the cost of service dependent upon the division of the road upon which it moved, and there are no statistics to give this data and guide the rate-maker. (R. pp. 1319, 1320.)

Mr. Wilmering testified on this subject as follows:

"Q. Are those rates so made that they reflect the cost of service, and that the rates can be taken as a measure of the cost or expense of handling the traffic?

A. In a general way the rates are not made on the cost of service. I believe that railroad rates are made on tradition, not on condition, and from my investigation I find that railroad rates, when they are made without restriction, are primarily made by the traveling freight agent or a contracting agent, and by up-to-date freight agents; they feel the pulse of the business around the territory occupied by their company, and in the past it has been the custom that if the business was offered and could not move at the standard rate, a lower rate was made, irrespective of the cost of service, to get the business. I have been present at the cross examination and assisted in the cross examination of many of the eminent railway traffic officials who are at the head of the traffic departments of those roads operating through the State of Oklahoma, and I have never heard one state positively that he had any regard for the cost of service in making rates." (R. pp. 862-3.)

On cross examination he was asked upon what he based this statement and explained it more fully, and then was asked to give instances, which he did in great abundance. (R. pp. 1123-1130.)

These specific details are too numerous for condensation, but are well worth studying.

Mr. T. A. Hamilton had quite a useful apprenticeship in minor railroad positions and then five years' experience in a rate-making office, and in the last few years has made a minute investigation of the rate situation in Missouri and Arkansas. His views, based on these experiences, are well worthy of consideration. He says:

> "I gave a great deal of thought and study to the rate conditions in that territory—Southeastern territory—for a good many years. I had to do it to earn my bread and butter. I saw those

rates in their daily application, covering practically all the territory east of the Mississippi River and south of the Ohio and Potomac rivers, and I do not believe that there is a more complex territory, from a rate-making or rate-applying standpoint, in the world.

"Rates were made down there—or at least they appeared on their face to be made—so no sane man could understand the reasons for them. Certainly a great many of them were made without any relation to the cost of service. I would like to illustrate that just a little:

"The Mississippi Valley tariffs to common points in the New Orleans group, carry from St. Louis a great many commodity rates.

"For instance, the rate on soap from St. Louis to Mobile, was 28 cents. The rate applied from the west bank of the river. The L. & N. paid the river transfers, as did all of its competitors, the Illinois Central, the Mobile & Ohio and the Southern Railway.

"The rate to points directly north of Mobile, through which Mobile traffic would pass on its way from St. Louis, were almost double the Mobile rate.

"The shippers here in St. Louis would secure what we called 'combination rates.' They had the privilege of shipping their stuff to Mobile at 28 cents and shipping it back at the local rate, making a much cheaper rate than the local rate to any intermediate point. As I recall it, those rates reached clear back to Montgomery. That is, we could make a combination rate cheaper than the straight of way local as far back as Montgomery; and not only that, but when you made the combination on Mobile, you made a St. Louis rate which absorbed a transfer. Your local rate was an East St. Louis rate, which did not.

"That is just one illustration of a great volume of rates that we made in that way.

"I recall that we had a considerable movement of stoves into interior Georgia points, and we found that in the every-day application of the rates we could make a cheaper rate by applying the rate from St. Louis to Jacksonville, Florida, and the local rate back into the interior of Georgia, than the published straight rate to the interior point. (R. p. 1474.)

* * * * * * * * *

"Another instance of making rates to meet the necessities of traffic, regardless of the cost of service, was a set of rates we had in another matter, East St. Louis to the Ohio River, on grain destined to the Southeast.

"We got grain delivered to us at East St. Louis that originated west of the Missouri River, as I recall it, and if it was properly reconsigned through the Southern Freight Commit-

tee—virtually a milling-in-transit arrangement, we hauled it to Evansville, Indiana, for one cent, and if it originated in Missouri locally we got four cents for the same haul. If it originated in an East St. Louis elevator with no indication or surrender of tonnage beyond St. Louis, we got 6½ cents for the same service.

"We had what was known as a proportional rate on grain, which was the same as that. We had a connecting link between Henderson, Kentucky, across the river from Evansville and Louisville, which was much shorter than our own line through Guthrie.

* * * * * * * * *

"It was along those lines, the handling of rates, not the making of them, their practical application to the every-day traffic, and applying that division of them between our line and other lines; work of that character. The building up of rates where we found that the fabric of our through rates could be defeated by combinations. It required quite a study; not only of the railroad I was with, but all of our competitors in that territory.

"That lasted some five years, that actual every-day experience in meeting these problems and applying them to the freight traffic of my employer, the railroad company.

"I have listened with a great deal of interest to what has been said by the gentlemen in this case regarding rate-making and it coincides quite a little with my experience in applying rates, and I would like to summarize that with my best thought on the matter.

* * * * * * * * *

"When a railroad traffic man states that the cost of service is considered in making rates, he undoubtedly has in mind the ideal condition. But as a matter of fact, the basis of his rates, owing to the manner in which they are adjusted from time to time—patching a new rate on to the old—must necessarily be tradition and precedent, and it would be necessary for the origin of that tradition and precedent to go back to the very genesis of railroad rate-making. Assuming that even at that time the first schedule of rates had a cost basis; that the road knew its costs and added a certain percentage of profit to that in making its freight rates—we would have to assume it knew its cost by actual commodities, but even that is doubtful, because the first railroads had to meet stage and wagon competition, as well as canal boat competition. Stages and canal boats were there before we had any steam engines, and if they had to meet that competition they had to meet the cost ideas of the canal boatman, the stage driver and the man who drove the freight wagon.

"If that is the basis of the present rate fabric, and rates are made by readjusting and rearranging, patching, extending and

contracting existing rates, I feel that any traffic man will bear me out in my statement.

"That does not seem to be a cost foundation, to begin with. If a traffic man has any idea at all as to the cost of service, it must necessarily express itself to him in some specific terms—he must have a unit, a yardstick to measure by.

* * * * * * * * *

"Even if we assume that the ton-mile cost of transporting each individual commodity on a given line of railroad was known to the traffic manager of the road and he desired to make his rate based on that cost, plus his percentage of profit, it is a grave question how far he could go in that direction. Certainly, he could not go beyond the first junction where he met short-line competition. He would have to meet his competitor there, and his cost ideas, or go out of business. He could not go beyond the first navigable stream where he would meet boat competition with rates made on a package basis in many instances, as in the case of many commodities between St. Louis and New Orleans and St. Louis and Memphis.

* * * * * * * * *

"It is a question whether a traffic man could solve all these problems and meet so many different conditions of operation and cost on other lines, and so many other traffic men's ideas of what rates are profitable, and still adhere to a basis of actual cost, plus a percentage for profit.

* * * * * * * * *

"As a matter of fact, a traffic man gets out of such traffic as high a rate as he can, but he must be satisfied with what the traffic will bear, or the industries will not open and his cars will come back empty.

"This reciprocal traffic must be considered, too, in making rates on business in the opposite direction where the volume of traffic is, where the predominating traffic is, as the fewer empty cars you have to haul back the less burden of that empty car movement cost your outbound traffic will have to bear.

"Rates to and from large territorial zones are made by freight committees and tariff bureaus, for all the roads operating in the territory affected, and while each road has nominally a voice in making the rates so promulgated, still the views of all or the majority of those roads interested must be met and harmonized. If they did not do that they would not promulgate the rate.

"Rates made in this way are applied by divers routes and the length of haul and general operating conditions, I would say, are seldom, if ever, the same on any two roads between any two given points.

* * * * * * * * *

"Surely rates made on the bureau plan are not based on the operating cost of any one railroad interested. Rates so made often operate to keep down rates to an intermediate and strictly local points where the conditions and cost of operation are entirely different.

* * * * * * * * *

"Combination rates are authorized by many railroads. That is, the through rate to a given point for a longer haul, plus the local rate back to an intermediate point, makes a combination that is lower than the rate published direct to the intermediate point.

"It is plainly apparent that the cost of service is not considered in making both these rates. It may be considered in making one." (R. pp. 1475-1478.)

In examining the record in Smyth v. Ames, the testimony of Mr. Albert Fink, a prominent railroad official of his day, for many years connected with the Louisville & Nashville Railroad Company, and at one time receiver of a railroad in Arkansas, was found to be in point on this subject. He was a witness introduced by the railroads in that case.

Testimony of Albert Fink in Smyth v. Ames.

Beginning at page 683 of the Smyth v. Ames record is found this:

"Q. In point of fact, have freight tariffs been framed and are they framed with reference to this matter of cost? A. Of course, the cost ought to be considered as an element in freight tariffs, especially to the extent that you should not do any work at a loss. Q. Would you say cost on any particular shipment or the average cost of transportation? A. If you would ascertain the cost of any particular shipment, of course you should not take the freight at a loss; but it is impossible to ascertain the cost of particular shipments, as I have explained before. You asked me the question how tariffs are formed, and I merely mentioned that cost was an element to the extent that you ought not to take any business at less than cost, but beyond that the cost has very little to do with the framing of tariffs; in fact, as a matter of practice, it is hardly ever considered. A general manager may have in his mind a certain minimum cost under which he does not want to take freight, but the freight agents don't know any more about the cost than the man in the moon. They make their tariffs on commercial principles. They find out what they can get and they adopt the tariff with a view of securing business. If a shipper does not want to ship by them at a certain rate, they must either go out of the business or they must take a less rate, and they have to regulate that from time to time to meet the demands of the public and commerce and of competition, but it is much oftener the case that the tariff of the road is made up by some other road; in fact, there are few roads that have much control over tariffs. They are simply guided by competition with other roads

and water lines and the competition in the market. That forms the principal basis in making tariffs. The cost of transportation is hardly ever considered.

Q. Then you would say freight tariffs are the outgrowth of experience more than arbitrary rules?

A. I would; they are changed constantly to meet the constantly changing conditions of the market and competition. If you were to fix a tariff permanently and some other competing road would lower its tariff, you would lose the business.

On page 670, this occurs in his testimony:

Q. You think the tariffs as made are not based on the cost of transportation?

A. As a practical question, I don't know any of the freight agents in the country who know anything about the cost of transportation.

Q. You think they are ignorant on that point?

A. They have no use for it.

Q. And they base it simply on commercial principles?

A. Commercial principles; that is the principal basis. Of course, I take it for granted that the general manager is looking after the cost of transportation, and no doubt the general freight agent might get his instructions as to what rate he may charge in certain given cases so as not to be below the cost.

Q. And the tariff is based usually, then, on what the traffic will bear?

A. Yes; if you understand that in the proper sense.

Q. I think I do.

A. If you mean by it, do men charge everything they can—I would not like to use that expression. Instead of that I would say what the service is worth to the shipper.

Q. In other words, the first item to be considered is the value of the article to be transported?

A. No; the first item is the value of the transportation service to the shipper. Suppose a certain article of transportation is to be moved from New York to this place; it depends upon the market whether the price here is high enough to stand a certain charge for transportation in addition to the cost of the article. If, for one reason or another, that same article is supplied in Chicago from another source at less than the charge for transportation added to the cost of the article in New York, then the article can not be transported here from New York unless the rate is reduced so as to put the New York article on a footing with the article from elsewhere."

THE STATE'S DEMONSTRATION EVIDENCE ON COST OF SERVICE.

(b) Heretofore is set out the opinion evidence on both sides of the proposition that the rates are based on the cost of service, and

EXHIBIT 38
Zone Rate on Grain.

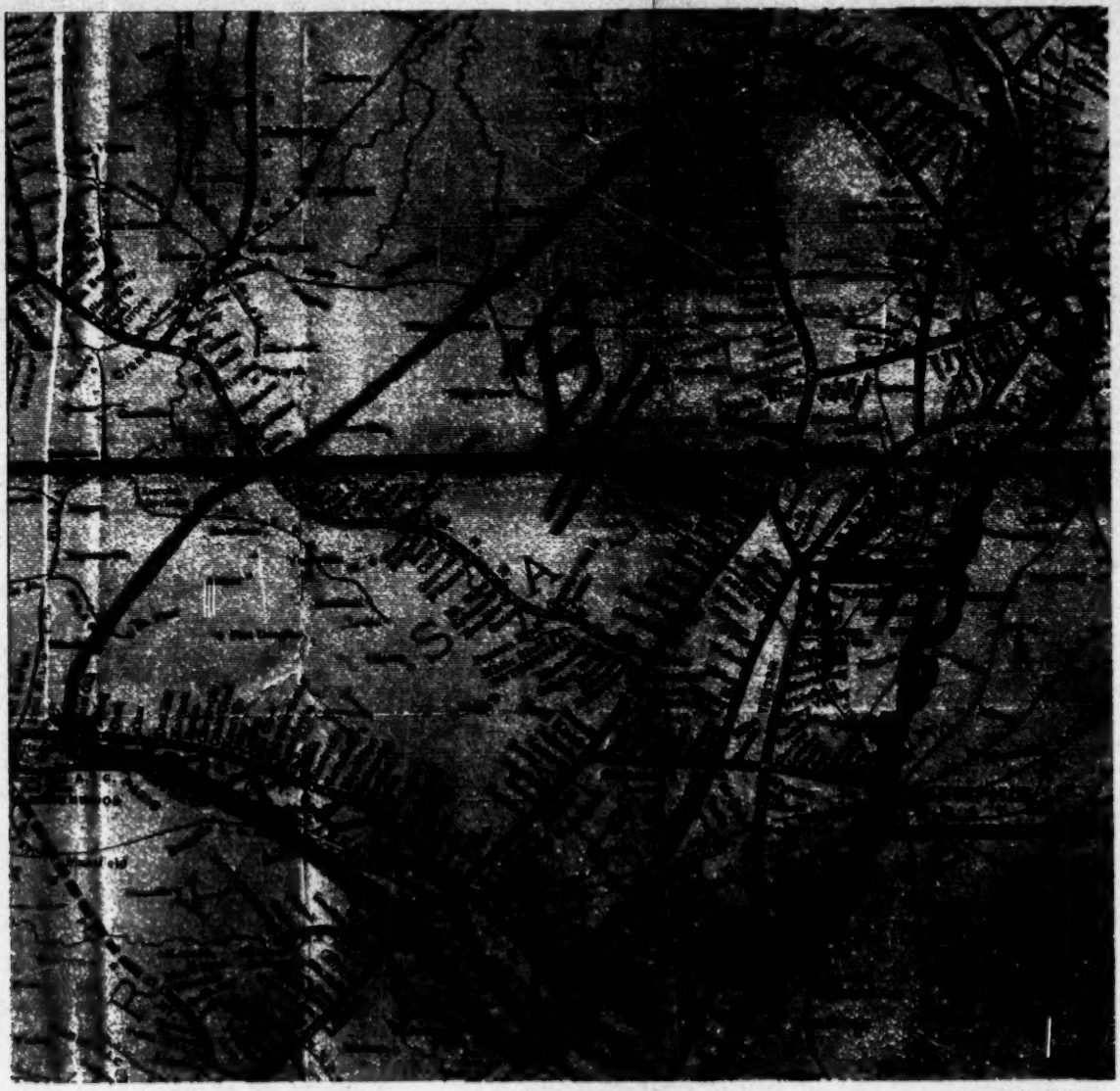

EXHIBIT 38.

Zone Rate on Grain.

your attention is called to another class of evidence on the subject, which we term demonstrative evidence, wherein the defendants showed from the rates and movements under them that the rates bore no relation to the cost.

Zone Rates.

The zone rates will be first considered. This term is not one accepted only by traffic men (R. p. 1647), but is an expressive one to the lay mind, and, as the facts are undisputed, may be adopted. These zone rates are fully explained in the testimony, and, to illustrate some of them, maps were filed, exhibits 38 to 44 inclusive. These are approved by Mr. Perkins, the Iron Mountain Traffic Agent, and made exhibits to his testimony. These maps are not printed, as they are too pictorial and expensive. Exhibits 38 and 40 are reduced and printed with this brief to illustrate pictorially the evidence regarding these zone rates.

The first zone rate considered is grain and grain products. It is illustrated by maps in exhibit 38. In reduced form these zones are herewith presented on opposite page. The grain rates are taken from Iron Mountain Tariff 5714-A, I. C. C. 9975. It names a blanket rate of 19 cents per hundred pounds in carloads on corn and 44 other commodities from all points on Missouri Pacific Railway Company, indicated as Group A, to all points on Iron Mountain, indicated as Group B on the map.

It applies from 157 stations in Missouri and Kansas to 369 stations on Iron Mountain in Missouri and Arkansas.

A blanket rate of 23 cents per hundred pounds is named for wheat and 13 other commodities from all except 11 stations in Group A to all stations in Group B.

The casualty risk on these different commodities vary materially, the minimum weight of cars for these different commodities varying 10,000 pounds and the car capacity varying also for the different products.

The records were investigated and quite a movement found under it—it was not a "paper tariff."

In illustration of the inequalities of the revenue derived under this tariff, flour moving from Independence, Missouri, into Arkansas with a 23-cent rate, moved through Arkansas to Southern territory at 14 cents for the Iron Mountain haul from Independence to Memphis. A shipment moved from Independence, Missouri, to McCrory, Arkansas, at 23 cents and another from the same mill to Asheville, North Carolina, passing through McCrory on its way to Memphis, paid the Iron Mountain 14 cents. (R. pp. 1462, 1463.) Yet this revenue is used in this case as the proper factor with which to divide the expenses of traffic!

The lumber zones are next considered, and are illustrated in maps in exhibit 39. The rates are taken from Tariff No. 5116, I. C. C. 6228.

It is a rate on Iron Mountain and 34 connecting lines situated from Little Rock south to points on Missouri Pacific in Missouri, Kansas, Nebraska and Colorado on D. & R. G. Railway in Colorado. There are three zones in the tariff for the destination of the lumber.

One zone extends from Coffeeville, Kansas, to Omaha, Nebraska, as far east as Etlah, Missouri, 80 miles west of St. Louis. The rate to that zone is 23 cents.

The next zone is in Middle Kansas and the rate is 28½ cents.

The third zone begins just west of Hoisington, Kansas, and extends to Pueblo and takes in the D. & R. G. as far north as Denver and as far south as Trinidad. The rate is 34 cents.

The producing territory covers 236 stations on the Iron Mountain and 300 stations on the named connections.

The zone to which the 23-cent rate applies includes 390 stations, the zone to which the 28½-cent rate applies includes 42 stations, and the zone to which the 34-cent rate applies includes 52 stations on Missouri Pacific and 80 on D. & R. G. Railway.

Testing the movement under this tariff for the first 15 days of October, 1907, it was found 426 cars moved (R. pp. 1456, 1457); a train of 28 cars per day, a very respectable sized train.

Another lumber zone rate is next illustrated in exhibit 40 A reduced edition of it is herein shown.

The rates are taken from Iron Mountain Tariff No. 4903-A, I. C. C. 5057, and provides a blanket rate of 18 cents on pine and cypress lumber, carloads, to St. Louis and 16 cents to Cairo from the zone extending from the Arkansas River to the Gulf of Mexico, including all South Arkansas, Louisiana and part of Texas.

The map does not show the Texas territory, but the evidence shows it applies to part of it, included in another tariff.

Taking this tariff alone, and it shows this rate applies from 584 stations in Arkansas and Louisiana to St. Louis and Cairo.

The most northerly point is Little Rock; the most southerly Lake Charles—a difference in the hauls of 214 miles, giving the shortest route to the Lake Charles movement.

Three hundred and nineteen of these 584 stations are located on connecting lines, and each of which receives its division of the 18-cent rate. To illustrate: If a car was shipped from Lake Charles to St. Louis, the shipper would pay 18 cents per hundred; it would be delivered to the St. Louis, Watkins & Gulf Railway and by it carried to Alexandria, Louisiana, and there delivered to the Iron Mountain, and the St. Louis, Watkins & Gulf would receive 6 cents and the Iron Mountain would receive 12; but if the Iron Mountain picked up another car at Alexandria, it would receive 18 cents for carrying it to St. Louis along with the Lake Charles car; and, going still further, if it picked up another at Little Rock, 150 miles north, it would receive 18 cents for hauling it to St. Louis.

There is no excuse from terminal service in the varying revenue;

EXHIBIT 40.

Zone Rate on Lumber.

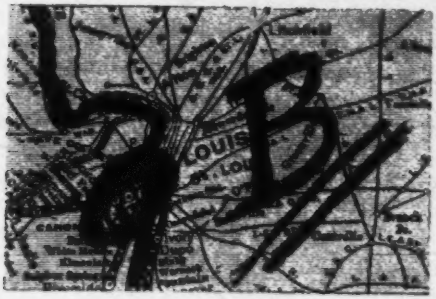

EXHIBIT 40.
Zone Rate on Lumber.

EXHIBIT 40.
Zone Rate on Lumber.

the record shows that during the first half of October, 1907, there were 22 lumber cars going to Iron Mountain from Louisiana Railway & Navigation Company, the Iron Mountain division being 13 cents, and 16 cars from Watkins & Gulf, for which it got 12 cents, both connecting lines, and exactly the same service, and a cost per hundred pounds dependent on the favor to the connecting carrier; and alongside these cars were picked up at Alexandria in the same period nine cars, for which the Iron Mountain got 18 cents. The total movement for the first 15 days of October, 1907, into St. Louis was 566 cars on this tariff. (R. pp. 1450-1456.) This would be 37 cars a day. The average through-train carload is 33 cars. Thus it is seen that under this one tariff alone more than an average through train went into St. Louis every day.

The zone rates on cotton seed products from producing territory in Arkansas and Louisiana to consuming territory in Missouri and Kansas are illustrated in exhibit 41.

There is a blanket rate of 17½ cents on hauls ranging from 256 to 598 miles. The first half of October, the time the books were examined, showed only a light movement under this tariff, 25 cars, for the 15 days (R. p. 1460), but that much moving so early in the cotton oil season would indicate a heavy movement later, and was so explained by the witnesses.

The rates on cotton from Arkansas, Louisiana and Missouri to Eastern seaports, principally Boston and Boston rate points, are illustrated in map shown on exhibit 43. There are numerous zones in the producing territory, but they are comparatively small, but the consuming zone is very large.

The lines east of the river got 35 cents of the rate, those west got the balance. On the eastern end of it the division of the rate is the same, whether the cotton is handled on to Portland, Maine, through the Boston terminals or stops at some mill near New York. (R. p. 43.)

The Texas common point rates are much discussed in the evidence They are illustrated on map in exhibit 42. The map does not show all the zones, but only illustrates three; the evidence explains them fully. The map only gives the Pittsburg territory and St. Louis territory and the receiving zone, which is the common points in Texas. This is all a southbound movement. The same commodities moving north bear another rate. The St. Louis territory extends from Southern Mississippi and a portion of Southwestern Alabama to Central Illinois, extending almost to the Missouri-Kansas line, taking in most of Missouri and part of Arkansas. The result is that the same rate applies from all that St. Louis territory to all of the 2,600 stations in Texas. For instance, the same rate applies from Jefferson City, Missouri, to any of these 2,600 Texas towns that applies from Newport, Arkansas, 60 miles north of the capital of Arkansas. The Chicago and Cincinnati territory extends from

Frankfort, Kentucky, to Omaha, Nebraska; there is an added difference here, as these shipments go into St. Louis on fixed differentials, and when the Iron Mountain takes it there its division of the rate shrinks on account of it, while the rate to the shipper is the same, and the Iron Mountain gets less from the haul from St. Louis to Texas, owing to the differential under which the shipment moved into St. Louis. The cost of the transfer at St. Louis would be more than the cost of receiving it from an industry at St. Louis, but the revenue is less. (R. p. 1458.) The same is true of the Pittsburg territory, the shrinkage greater.

Taking the other end of the situation: The Iron Mountain ends at Texarkana, Arkansas, on the Texas line; it does not deliver a car of this freight to any of the Texas common points, the first one being a few miles from Texarkana. Its haul of all of it (except the small part picked up between St. Louis and Newport, Arkansas), is identical. These Texas towns are distant 626 miles from furthest points. In every case one, and from that up to half dozen, railroads would get divisions of this flat rate, and yet the cost of the service is identical for all of it so far as the Iron Mountain is concerned. (R. pp. 1456-1459.)

Mr. Perkins, the Iron Mountain Freight Agent, testified at great length about these rates, in explanation and justification of them. We are not concerned with their righteousness—merely whether the revenue derived from them is a proper factor with which to divide expenses. (R. pp. 1620, 1627.)

It is in evidence that the transstate traffic of the Iron Mountain is 51 per cent of the total ton-mileage, and Mr. Perkins was asked what proportion of that 51 per cent was the movement to Texas common points under these rates; he said it would be from 5 to 10 per cent of the 51 per cent. (R. pp. 1644, 1645.) In other words, it would be about 3¼ per cent of the total ton-mileage of the road in Arkansas, just about half as much as the intrastate ton-mileage. This is the only evidence in the case on this subject and we presume may be taken as correct. Mr. Perkins was questioned in regard to the divisions between other roads and the divisions between Arkansas and the other States on the track mileage of the revenue received from these Texas shipments. He admitted the revenue would be different on the different shipments owing to the point at which the shipment originated, although the service would be identical. He admits that the apportionment of the revenue to Arkansas by the track mileage would give different revenue for shipments carrying the same rate where the length of haul of the Iron Mountain was identical. He also admits it would vary owing to how many carriers handled it in Texas, although the service of the Iron Mountain was identical, whether handled by one or half dozen. To illustrate: On a shipment of shoes from St. Louis to San Antonio, and a similar one to Marshall, Texas, each carried in the same train or car from St. Louis

to Texarkana, there would be a difference of 25 cents per hundred in the revenue to the Iron Mountain for the identical service. (R. pp. 1640-1646.)

The zone rate on citrus fruit is also explained. While the movement is small, it is an extreme case, and part of the interstate revenue is made up of it, which is the factor used by the railroad to apportion their expenses. It is taken from Iron Mountain Tariff. (R. p. 5118.)

It applies to lemons, oranges, grapefruit. The rate is $1.00 (for 1907) on lemons and other citrus fruits from California to Colorado common points, Missouri common points, Mississippi River common points, Chicago common points, Cincinnati and Detroit common points, Pittsburg, New York and Boston common points. There are several exceptions in Texas, Colorado and the far East, but, broadly speaking, the same rate prevails from the eastern ridge of the Rocky Mountains to the New England States. The same rate applies from Los Angeles to Denver as from Los Angeles to Portland, Maine; Topeka, Kansas, and Boston enjoy the same rate from California.

The member of Congress from Lincoln, Nebraska, pays the same freight on his lemons from California while in Washington that he does at home. Similar rates from the Pacific Coast obtain for dried fruits, canned goods and vegetables, dried beans, celery and some fresh vegetables. There is a constant, but not large, movement of this over Iron Mountain rails. For instance, 22 cars of California dried fruits moved in the first half of October at $1.25 per hundred pounds over Iron Mountain rails, and of it these cars well illustrate the whole:

One shipment of dried raisins from Fresno, California, via El Paso to Knoxville, Tennessee, delivered by Iron Mountain to Southern Railway at Memphis, and the part of the rate from Fresno to Memphis was 90 cents; on a similar car going to Atlanta, likewise delivered by the Iron Mountain at Memphis, the western proportion of the rate was 85 cents. This rate, like the cotton rate, breaks at the Mississippi River. Of this class of fruit traffic there were about 100 cars the first half of October. (R. 1464.)

Outside of the lumber zones, there are interesting lumber rates. One hundred and eighty-four cars moved in first half of October to Kansas City from Alexandria. They were hauled each 812 miles by the Iron Mountain from Alexandria to Kansas City, and were delivered to different connections going to different points not in lumber zones; the Iron Mountain received for two of the cars 11 cents, two cars 12 cents, one car 12½ cents, 11 cars 13 cents, seven cars 14 cents, one car 14½ cents, two cars 15½ cents and two cars 16 cents.

From Smithton, 600 miles from Kansas city, there were two cars moving at 9 cents; three cars at 13 cents, seven cars at 11 cents, nine cars at 12 cents, four cars at 13 cents, one car at 14 cents, three cars at 16 cents.

At Prescott 16 cars moved to Kansas City at 11 cents, one car at 12 cents; six cars at 13 cents; nine cars at 14 cents. The variance in the haul at 13 cents was from 445 miles to 633, and variance in rates for the same haul from 9 to 16 cents.

A 15-cent rate was found on four cars from Benton, 445 miles from Kansas City, and 11-cent rate on two cars from Alexandria, 812 miles away. Except for 24 miles from Benton to Little Rock, these cars traveled on the same track. Another instance is 20 cents from Texarkana, 665, as against 11 cents from Alexandria, 812 miles. These are typical of the 184 moving into Kansas City the first half of October. The waybill number, date and billing stations of all these movements were furnished. (R. pp. 1465-1468.)

A calculation of the differences in amount per car on these Kansas City shipments, taking an average car as standard, shows from $55.00 to $85.00 is the difference in revenue per car.

In addition to this movement into Kansas City, we find lumber moving from Smithton to Pueblo, 1,022 miles, at 16 cents, and other similar cars from Smithton to Kansas City at 16 cents, only 600 miles.

Movements of lumber from Hope, Arkansas, to St. Louis on Iron Mountain and then beyond St. Louis on some other road went on rates of 7½ cents, 11 cents, 11½ and 13 cents to the Iron Mountain and yet if the cars had stopped in St. Louis it would have been 18 cents. (R. p. 1468.)

The State put on one of the plaintiffs' chief witnesses, Mr. J. D. Watson, Assistant General Freight Agent of the St. Louis Southwestern Railway Company, and proved by him these rates prevailing on interstate movements in Arkansas during the period of our inquiry: Coal from Illinois points to Little Rock, $2.25 per ton; coal from same place to Grady, 50 miles south of Little Rock, $2.25; and coal from Illinois fields to Monroe, Louisiana, $2.00; Tullaloola, Louisiana, $2.00; Vidalia, Louisiana, $1.60; Rayville, Louisiana, $2.25; all these Louisiana shipments passing through Arkansas but not through Little Rock, ranging from 150 to 200 miles longer haul for the same, and, in most instances, less rate. (By other witnesses it was shown there was a large movement of coal into Arkansas and Louisiana from the Illinois fields under these rates.) (R. pp. 923-924.)

The rate on shoes and dry goods from St. Louis to Little Rock is $1.00 per hundred, to Alexandria, Louisiana, $1.25; and to New Orleans, 90 cents.

Packing house products, 31 cents from St. Louis to Little Rock; 44 cents to Alexandria and 30 cents to New Orleans.

Pianos from St. Louis to Little Rock 65 cents, and to New Orleans, 75 cents.

Soap, St. Louis to Little Rock, carload, 33 cents, L. C. L. 49 cents; to New Orleans, carload, 22 cents, L. C. L. 25 cents.

Beer, St. Louis to Little Rock, 27 cents; New Orleans, 21 cents. (R. pp. 924-927.)

When it is remembered that Little Rock is the basing point for practically all Arkansas on these interstate shipments, the effect of the Little Rock rate is as a stone cast into a pool—the ripples extend with lessening force to its extent.

Mr. Watson was given time to furnish further data, and was recalled.

Beer shipments from Milwaukee and St. Louis compared, the service identical; the haul from St. Louis to Little Rock. If the beer originated in St. Louis, 27; but if delivered in St. Louis, originating in Milwaukee, 23.7 cents. Packing house products, if originating in St. Louis, the rate is 31 cents; if in Chicago, for the same haul of the Iron Mountain, 30.2 cents (the only one nearly the same).

Farm wagons, if originating at St. Louis, 33 cents; if originating at Moline, Illinois, and attached to the other car originating at St. Louis, and each hauled to Little Rock, 3 cents per hundred difference.

Boots and shoes from St. Louis to Memphis, 65 cents, but if stopped at Paragould, some 75 miles from Memphis, 81 cents; the haul to Memphis passing through Paragould (quite a little city and junction point).

Packing house products, St. Louis to Memphis, 26 cents; stopped at Paragould, 43 cents; carload rate, Memphis, 21 cents; Paragould, 26 cents. (R. pp. 950-953.)

It is frequently stated throughout the evidence that lumber, grain and coal constitute the largest movements in the State. Two coal fields serve the State—the Illinois field and the Western Arkansas field; the latter on an intrastate zone rate from the coal field into Little Rock and distance scale out of Little Rock. This is the only zone rate in the Commission Tariff.

There are no reliable statistics in the record as to the proportion of each commodity. Mr. Roth, a statistician for the Iron Mountain, filed a table at page 1979, but it widely misses the mark. It gives for the year 1909 (two years after our period of inquiry) statement of freight traffic of the entire Missouri Pacific and Iron Mountain systems, a system in nine States, and the intrastate for 1909. If the data is properly compiled the intrastate statistics may have some value for this later period, but the system statistics are utterly useless for any purpose of our case. Cotton, for instance, is given as 2.43 per cent of the total traffic of the system, when practically all of it was raised in Arkansas. The Iron Mountain reaches with small mileage into the cotton belt of Louisiana and Oklahoma, but the bulk of its mileage in the cotton section is in Arkansas, and practically none of the Missouri Pacific States raise any cotton at all. Arkansas raises about a million bales annually, all of which is interstate. The same criticism is true of cotton seed products, 1.38 per cent of the system. Lumber and forest products is put down as 21 per cent of the system

and 40 per cent of the intrastate. Many of the Missouri Pacific States are barren of lumber. Several witnesses have estimated the lumber traffic of the Iron Mountain at 35 per cent of its total traffic in Arkansas; certainly 30 would be conservative. Next would doubtless come grain—all interstate. Mr. McPherson says lumber and grain were the dominating commodities. (R. p. 403.). It is proved by many to be a large amount. Coal is about, if not quite, as large a movement as grain. Cotton is probably 10 per cent of the total traffic, including the cotton seed and its products.

The Texas common point traffic is estimated by Mr. Perkins at 5 per cent to 10 per cent of the whole transstate, 51 per cent of all, say 3½ per cent the whole; the fruit of various kinds, traffic from California, would easily bring these two transstate movements to 5 per cent of the whole.

These deductions are not claimed to be accurate, but are given as A rough approximation based on the testimony:

	Per Cent.
Lumber	30
Grain	20
Coal	15
Cotton and products	10
Texas common points and fruit movements	5
Other	20
	100

Easily 80 per cent of the traffic is moving on zone rates, made regardless of distance. Much of the other, the high class, good pay merchandise traffic, is moving on competitive conditions that delivers shoes in Memphis for less than in Paragould, a city through which they pass *en route* to Memphis; and beer to New Orleans for less than to Little Rock, and farm wagons produce different revenue to the Iron Mountain for the same haul, depeudent on whether they are manufactured in Moline or St. Louis. Coal always has a zone rate in originating territory, but it is usually small. From any point in the Illinois fields coal is carried to Little Rock at $2.25 per ton and on through Arkansas to Louisiana cities for $2.00 per ton.

We insist that the foregoing evidence, not of isolated instances, but of the great movements in the State, demonstrate that voluntary interstate rates are not based on the cost of the service and the expense of the movement bears no relation whatever to the rate on which it moves.

Mr. Nay, the plaintiffs' chief witness on the theory of their case, says:

"Q. And when the rate does not represent the cost of the service it (the revenue basis) would not be of any value at all, would it?"

"A. Well, if there was such a rate, no, sir; it would not be." (R. p. 660.)

"Of course, if the rates are not based on the cost of the service, if there are such rates, that is one of the weaknesses of the revenue basis, which I freely admit. And the weakness would be simply to the extent of the relative amount of such business, as compared to the whole." (R. p. 662.)

Division of Rates.

Another subject forming part of the problem as to whether rates reflect the cost of the service, is the division of rates. Incidentally, in presenting the evidence preceding this, much of it has been presented, but it deserves further consideration. In order that there might be no controversy over the facts, when some question relating to plaintiffs' methods of dividing the revenue in the exhibits were put to Mr. Perkins on cross examination, Mr. Roth, one of the Iron Mountain statisticians who prepared much of the exhibits, testified that the interstate revenue was divided between Arkansas and the rest of the haul on a "straight track mileage." (R. pp. 1640-1642.) To illustrate: If a shipment moved 900 miles, of which 600 was on the Iron Mountain rails and 300 of that in Arkansas, the revenue received by the Iron Mountain would be divided on a track-mile basis; in this instance Arkansas would be credited with one-half. There is no fixed rule among railroads as to the apportionment of the rate among themselves as to what the Iron Mountain part of the haul would be.

Mr. Perkins says: "It is a varying rule. We have arrangements with each different line. They are made sometimes on actual mileage and sometimes on constructive mileage, and sometimes on an arbitrary basis." (R. p. 1643.)

Mr. Watson, of the St. Louis Southwestern Railway, thus explains it:

"Q. Your division sheets with the other roads will differ, too, will they not?

A. There is a competition in divisions just the same as in rates, you will understand.

Q. How is that division usually made?

A. That is a very difficult question, because they are not usually made on any fixed scale. There are just as many varying conditions that enter into fixing the divisions as enter into the fixing the rates.

Q. What are the usual bases for fixing the division?

A. I can name some of them to you:

Mileage pro rate; constructive mileage pro rate; rate pro rate; revenue of locals—I could name them to you by the hour.

Q. Those are the principal ones you have named?

A. Yes, sir.

Q. That will make differences as to what your transstate revenue amounts to, as the different basis is adopted for each rate?

A. That would indicate that you understood my former answer to mean that we had different bases for the same service between

different carriers offering the business at the same junction, which is not true.

Q. I did not mean that. I meant the whole body of your transstate business.

You have different bases to reach your transstate revenue and they will differ. That is what I mean.

A. It may differ as to service in different directions, but it does not materially differ for the same service, under the same conditions and on the same traffic. But if we were to take a shipment, as an example and to indicate why I am trying to differentiate—if a shipment was offered to us on a point on the Southern Pacific, we would be forced to allow a division that would compensate that line for turning it over to us.

If the same shipment were to originate on the I. & G. N., who have not this long line to New Orleans, the revenue for that line for this service would probably be somewhat less than we would have to allow the Southern Pacific.

Therefore, on the same traffic, from two different points, on two different lines, our revenue from the junction point to destination or as far as we would handle the traffic, would be different." (R. p. 1690.)

In cross examining Mr. Perkins, by taking many illustrations usually of transstate Texas movements, it was shown that the revenue accruing to the Iron Mountain under this track-mileage division, used in the exhibits of the railroads, gave a different revenue for identically the same service and on the same rates, dependent on the origin of the shipment, on the arrangement with the particular carriers from whom received and further dependent on the particular arrangement with the carrier to whom it was delivered; and further dependent on whether the shipment was north-bound or south-bound. (R. pp. 1642-1646.)

The transstate traffic is 51 per cent of the total; naturally the bulk of it is handled by the Iron Mountain as a connecting line. Whether hauling as a connecting carrier or as sole carrier, the revenue is cut off to Arkansas in proportion to the haul in the State compared with the haul on the system.

The service performed is in each instance identical, whether it is as connecting carrier or sole carrier. To illustrate: Lumber from Louisiana to St. Louis incurs exactly the same service and expense in Arkansas, and the revenue from it depends on the division made in Louisiana with the connecting carrier, which varies materially, and again varies if received from a shipper in Louisiana and not a carrier, yet the expense and service in Arkansas are unchanged by the agreements in Louisiana. The haul is the same through Arkansas and the revenue varying from 11 cents to 18 cents for each hundred pounds is respectively cut by the same division in Arkansas. One shipment produces $30 and another handled with it produces

$20; if the mileage in Arkansas was half the total haul on the Iron Mountain, for one the State is credited with $15, for the other $10, and has paid exactly the same expense for each car. If it goes beyond St. Louis, say to Chicago, still another shrinkage on the revenue for the same haul. Taking a shipment of shoes from a shoe house in St. Louis,, one car to Marshall, Texas, and another to San Antonio, the Iron Mountain hauls them together from St. Louis to Texarkana and turns them over to a connection there, and for the same haul receives 25 cents difference for each hundred pounds, although each car has cost it to the farthing the same. Grain from the Northwest to the Southeast passes through Arkansas over the expensive White River branch. Of this branch Judge Trieber said, in deciding this case: "On the other hand, the White River branch of that road was the most expensive road ever constructed in the State. Miles of it had to be cut out of rock, and tunnels cut through rock mountains. There are no large cities along its line, and the country but sparsely settled. Owing to the heavy grades and many curves, made necessary by the topography of the country, it can not possibly carry as many cars to a train and transport freight as economically as the main line." (R. p. 2606.) The service of handling this grain is identical whether to New Orleans for export or to the cotton and sugar plantations of Mississippi and Louisiana for mule consumption.

The cost on the Iron Mountain is the same, whether it originated at Kansas City, Omaha or Sioux City; and it matters not, so far as cost is concerned, whether it goes from New Orleans to Mobile, Alabama, or the Panama Canal, and yet all of these are factors to determine the revenue, whereas the cost in Arkansas for each of the cars, irrespective of origin or destination, is fixed when handled over this line. The evidence shows most of it is hauled over the White River branch, but still there is a large movement on the Central branch, which would be less expensive service, and that leaves another element of variance between cost and service. We are not questioning the wisdom or unwisdom of such rates and divisions; these are questions for the Interstate Commerce Commission, with which we are not the least interested, but when the revenue produced by these rates is submitted as the yardstick with which to measure cost of producing this revenue, then these inequalities become interesting and pertinent.

Mr. Perkins, in reply to questions as to differences in revenue received on lumber shipments to Kansas City, and on shipments there delivered to connecting lines, says the expenses are not the same, because the terminal expense at Kansas City would be heavier for delivering a shipment to an industry there than to a connecting carrier. His attention was called to the fact that the mileage pro rate of the rate would not take care of the Kansas City terminal expense, and, after a good deal of fencing, he finally admits that, taking the

lumber traffic as a whole, the track-mileage division of the revenue would be unfair to Arkansas, as the terminal expenses in Kansas City and other large cities are greater than the initial terminal expenses, where the traffic originates in Louisiana and Arkansas. (R. pp. 1652-1654.) He says the terminal expenses on grain would run about the same as on lumber. (R. p. 1657.)

Mr. Perkins makes an estimate (and it is the only one in the record) of the proportion of the lumber traffic originating south of the Arkansas State line from the lumber zone extending from the Arkansas River to the Gulf of Mexico. He estimates that from 10 per cent to 20 per cent originates in Arkansas and that from 80 per cent to 90 per cent originates south of the Arkansas State line. (R. p. 1659.) For facility, say 15 per cent originates in Arkansas and 85 per cent in Louisiana.

Mr. Perkins had previously testified that while the rates from Little Rock were high and from Lake Charles low, they were so adjusted as to give a fair profit on the entire lumber business, and that as a whole they were as high as conditions justified. (R. pp. 1621, 1622.) He admitted he knew nothing of a track-mile division of the revenue in this case, and did not have that in mind in giving said testimony. (R. p. 1660.)

Mr. Perkins says the average cost per ton per mile of all their traffic is between 5 and 6 mills; and the revenue per ton per mile on all lumber traffic about 6 mills, and from these two statistics he bases his statement that there is a small profit on the whole lumber traffic. (R. p. 1658.)

Alexandria is the southern point of the Iron Mountain that receives lumber. All the lines converging at Alexandria and carrying lumber to it receives 6 cents of the 18 cents, except one receives 7, so that the movement on the Iron Mountain from Alexandria to St. Louis—using St. Louis as an illustration; the same thing would apply to any of them—the Iron Mountain would receive 12 cents for all of that lumber from the southern part of the zone, for the haul from Alexandria to St. Louis.

That would be equal to four mills per ton per mile for the haul from Alexandria to St. Louis.

The lumber from Little Rock to St. Louis, on an 18-cent rate—or from any of these points where they get the maximum—would earn 10 mills per ton per mile.

In order to have any general average conditions, wherever you had one of the low rates, you would have to have one of the high rates. That is the only way you can make a general average of rates. Only 15 per cent of that movement is represented by the high rate of 10 mills per ton per mile.

If we would concede that all of the Arkansas lumber took that—the highest rate—and, of course, that is not true, because the evidence shows these numerous tap lines throughout the State divide up that

18-cent rate with the Iron Mountain—but assume, for the sake of the illustration, that all of the Arkansas lumber received the maximum of 18 cents, or 10 mills per ton per mile, and make a calculation on that; averaging those two rates, the highest and the lowest, the result is 7 mills.

But as only 15 per cent is represented by the high rate of 10 mills per ton per mile and 85 per cent is represented by the 4 mills rate, it works out that the average haul on the whole business earns 4.9 mills.

Mr. Perkins says that the average cost on the Iron Mountain, of all commodities, is between 5 and 6 mills.

The average revenue on lumber, he says, is about 6 mills.

So, by reason of the fact that the high rate in Arkansas represents only 15 per cent of the traffic, if you take these general average conditions to even that up you have that lumber traffic as it passes through Arkansas averaging less than 5 mills, a mill a mile less than cost.

As a matter of fact, the great body of this traffic in Arkansas does not move under the 18-cent rate, but it is divided among these tap lines, as developed in the evidence. The exact average would necessarily be much lower than the example given and much lower than the average cost of service.

But this is only a small part of the inequality. The divisions are inequal from connecting and tap lines, while the expenses, after receipt by the Iron Mountain, are identical.

The division sheets of the Iron Mountain with its connecting roads in Arkansas on the St. Louis rate of 18 cents were put in evidence. The division of each of these roads are given in detail. (R. pp. 1454, 1455.) For the first half of October there were 566 cars moved under these various division sheets. The rate to the tap line or connecting railroad ranged from 1 cent to 7 cents out of the 18-cent rate. There are 33 of these tap lines or connecting carriers.

One of the "connecting carriers" was a road one-half mile long.

To Cairo, the rate is 16 cents and the same division sheets apply, making the revenue from the haul to Cairo vary from 9 to 15 cents per hundred pounds. (R. p. 1456.)

Mr. C. W. Lewis, a shipper of lumber, and familiar with lumber rates, testified as to the actual movements of lumber from Southern points, being under the tariffs illustrated in exhibits 39 and 40. His testimony begins at page 906.

He says that in addition to the zones, there illustrated, that there is another zone rate from territory directly east of the producing territory there shown, composed of part of Louisiana and territory east of the river, and the rate from it to St. Louis is 16 cents, 10 cents lower.

Mr. Lewis says the lumber from Arkansas largely moves into the zones shown on the maps. He also explains the tap line divisions:

"Q. Now, what we are particularly trying to find out in this case, is the cost of service and the revenue producing the rate; I want to know what would be the difference in cost, say that a shipment originated in the woods on some tap line, and was carried to St. Louis at 18 cents, and another shipment originated at your mill, and you say you have no tap line—that goes into St. Louis, and suppose the tap line joined the main line just where your mill is, what difference would there be to the Iron Mountain Railroad, if you were on that road, in hauling two cars of lumber, one from your mill and one from the other mill?

A. I don't think there would be any difference in the cost of transportation, so far as the Iron Mountain is concerned.

Q. What would be the difference in revenue?

A. For the Iron Mountain, you mean?

Q. Yes, sir.

A. The difference in revenue would be whatever they would pay a tap line, whatever it might be; those tap-line divisions don't all run the same; some fellows are able to squeeze more out of them than the others are.

Q. There is a variation on the revenue of the amount paid to the tap line?

A. Yes, sir.

Q. Does this division principle also apply to different railroads; suppose that lumber was shipped into Alexandria on the Iron Mountain from some other road—

A. They publish a through tariff and divide it up; yes, the same rate is applied, the same as in going over three or four railroads.

Q. And suppose that there would be two cars of lumber shipped via the Iron Mountain from Alexandria to St. Louis, and they would get the 18-cent rate, as I understand it; one of those cars originated at Alexandria, and was delivered to it there; the other originated at some other point on some other railroad, and was delivered to it at Alexandria, and those two cars were hauled to St. Louis together; as far as you can say, would there be any difference in the cost of service in hauling those two cars?

A. No, sir.

Q. Would there be any difference in revenue?

A. Of course, if the Iron Mountain started the shipment and carried it all the way, there wouldn't have to be any division, they wouldn't have to divide it with anybody else.

Q. That is the illustration I gave you of one car, and the other car they would divide that with the road that brought it in?

A. Yes, sir; the one they hauled on their own line all the way, they wouldn't have to divide.

Q. Is there much lumber shipped that way on divisions?

A. Practically all the big mills, they get a division, as far as Arkansas is concerned; practically all the big mills have short lines

of railroad, that is owned and operated by the same people, but of course, it is a separate corporation and the sawmill does not get any rebate, but the railroad gets the division." (R. p. 909.)

Mr. Lewis states there is a rate from Louisiana into Little Rock of 22 cents as against 18 cents from Louisiana to St. Louis, in order to protect the territory near Little Rock. (R. p. 910.)

He says that some of the tap lines have their mills on their own lines, away from the junction point, and then they haul empties to the mill and return them loaded to the railroad; for that service and originating the traffic they get a division of the rate, but many of them have their mills at the junction point, and every cent paid the tap line "is that much over the other fellow that doesn't own the railroad." These tap lines run from 5 to 40 miles in length. (R. pp. 913-915.)

Another queer freak in division of rates is developed in the cotton rate and the California fruit rates. Each divide on the Mississippi River, and a fixed proportion goes to the carriers for the haul east and for the haul west. Cotton, for instance, is fixed at 35 cents for the haul east of the river, divided among many. From the Little Rock zone the rate is 80 cents, being 45 for the western division; from Fort Smith it is 85 cents, being 50 cents for the western division; and from Oklahoma (owing to ocean competition), is 70 cents, being 35 cents for western division, and that for a longer haul, than from either Little Rock or Fort Smith.

There is evidence that 50,000 bales are compressed at Fort Smith; probably half of it from Oklahoma; the other half from Arkansas, the service of the Iron Mountain the same, but on the cotton originating 20 miles west of Fort Smith, and hauled in there and compressed and shipped to Boston, the road participates in a 35-cent division; but if hauled from a point 20 miles east, and compressed and shipped to Boston, it participates in a 50-cent division.

(3) THE RELATION OF THE INTERSTATE AND INTRASTATE RATES.

Necessarily, there will be some repetition in presenting the evidence on this subject, as it is so closely interwoven with the preceding subjects.

Plaintiffs' Evidence.

Mr. Flippen, General Freight Traffic Manager of the Iron Mountain, said: Q. "What is the practice of railroads usually in the observance of a relation between State and interstate rates, if there is any general practice? A. There is a very close relation. In fact, the making of rates have to do with the commercial conditions; the cost of service; the conditions generally; and where the earnings have not been, as we figure it, compensatory in respect to State traffic, the same is frequently true of interstate adjustments, because one is so very seriously affected by the other." (R. p. 239.)

This developed on cross examination:

"Q. When you say you have to have a proper relation between them, I would like to know just what you would consider a proper relation between interstate and State rates, taking the whole volume of your traffic into consideration?

* * * * * * * * *

A. I do not know without having figured it out exactly, because the conditions with respect to certain articles and commodities are so entirely different. You can not take the whole volume, as a traffic man, and say just to a fraction just what the relative percentage of adjustment would be. It is impossible to do that.

Q. I am not asking it just to a fraction. I am asking you to give just your best approximation on that.

A. I can not say as to that, unless I make some figures on it.

Q. When you put in the State rates on November 2, 1908, did you make figures then of the relation that one should bear to the other?

A. Yes, sir; I explained how we made them. That we made them with relation to commercial conditions, and the service, by comparison with the figures that prevailed in other States under similar circumstances and conditions; and that as a whole it fitted in.

I don't know that I could explain it any better. (R. p. 250.)

Q. You do not establish your rates, then, on the relation that the revenue from one rate would bear to that of another?

A. Oh, yes. Classification is made up that way.

Q. Classification is made up that way?

A. Yes, sir; and that is the way the rates are made, with respect to classification.

Certain articles are susceptible to damage; its bulkiness or lack of density, if you please; and the character of the equipment that is required to handle it; and the expedition that is sometimes required. All those things are factors that enter into that.

Q. Those are the factors that determine the rate so far as classification is concerned?

A. Yes, sir; one article compared with another. For instance, we would not haul feathers at the same rate we would pig-iron.

Q. You would fix a rate to compensate you for the difference in the weight, the difference in the liability, the difference in the cost of handling, and many other elements of that kind?

A. Yes, sir; according to our best judgment, having in mind that the total result is remunerative.

Q. Then the rate is more a relative proposition than it is one of cost of operation, isn't it?

A. No, sir; you can not say that. You must bear in mind the cost of *of* operation, or you would not be making the rate.

The rate is the price at which we sell transportation; and you must bear in mind, according to the best judgment and experience of men

who know, what it costs, otherwise we would not be making a rate. You would not last long if you made it without regard to that.

Q. That would be as to total rates. But I am speaking of the relation of one rate to another.

Take your illustration of iron and feathers: the relation of those would be determined very largely by those other factors rather than by the cost of operation?

A. Oh, yes; there are so many factors that enter into it that it is very difficult to differentiate to a nicety." (R. pp. 252-3.)

Then he says the Arkansas adjustment would not affect the transstate rates. (R. p. 253.)

As the transstate ton-mileage is 51 per cent of the whole, necessarily this relation is confined to the other 49 per cent, part of which is the intrastate itself.

Mr. McPherson advocates the revenue theory with an extended argument, but, when asked as to the cost of service as affecting it, declined to discuss rate matters owing to his unfamiliarity with them (R. p. 402); and when pressed further, said:

A. I don't understand the traffic well enough to say what the relation between intrastate and interstate rates is.

Q. Is not that a necessary factor in the development of your revenue theory?

A. Not necessarily; no. I must assume that it exists. I believe that it is generally assumed that it exists. If the State rates for any reason are lowered, the interstate rates are lowered, and that relation would doubtless continue under such circumstances. If the State rates are raised, I presume that the relation is still continued by a raise in the interstate rates." (R. p. 429.)

This is a queer situation, without sufficient knowledge of rates to know their relation to cost of service and of State to interstate, he assumes the latter exists and builds up his argument upon it.

Mr. Watson answered that such an example of the workings of the revenue theory, as shown in exhibit 23, was impossible, because the interstate rates must change with the State rates. (R. pp. 560-561.)

He explains that the railroads could not consistently let an increase of 33⅓ per cent in State rates exist without an increase in interstate. (R. p. 572.)

He says the intrastate rates base the interstate rates. (R. p. 582.)

Mr. Watson was put on in rebuttal, in answer to Mr. Bee's statement that there was no relation between State and interstate rates, because of the difference in the haul of the two classes of business, and said:

"The difference in the length of haul could not destroy the relation as between State and interstate rates for the reason that the State rate in Arkansas to a controlling extent bases the interstate rate.

In the case of the distance referred to in Mr. Bee's testimony, St.

Louis, 500 and some odd miles, as against 50 miles within the State, the relation was still there, but it would require a rate man to check that relation to show what the relation really was and how the one rate affected the other, or would affect the other, but the difference in the distance, as stated by Mr. Bee, would make it difficult for him to understand from the railroad's record just where the relation lies.

There is a very clear relation as between all State rates and all interstate rates operating into the same territory. That is pretty well shown in the testimony in regard to the sugar rate in Arkansas.

The sugar rate from Helena to various points in the State of Arkansas was fixed upon a maximum basis of 13 cents. That added to the rate to Helena from New Orleans, made the rate from New Orleans to the various points in Arkansas, the maximum rate being 25 cents, which was the exact Helena combination.

That is also shown to a very marked extent in all of the adjustments in the State of Arkansas.

Our adjustments in the territory south of Pine Bluff is probably one of the best examples of this." (R. p. 1673.)

On cross examination his position was fully brought out:

Q. When you have been referring in your testimony to relation between State and interstate rates, you are not referring to the cost relation of carrying those commodities, State and interstate, but you are referring, as I understand you, to the effect that the State rate has on the interstate rate; is not that true?

A. "This is true; yes. Both sections of the question are true.

Q. Both of them?

A. Yes. There is a cost relation always, regardless of what the scale rate may be.

Q. What is that cost relation?

A. That is brought about by the adjustment produced by the classification.

Q. Do you know the cost of carrying any commodity, Mr. Watson?

A. The actual cost of carrying any one commodity?

Q. Yes.

A. No. I don't think any one does.

Q. You can not very well adjust the cost relation without having any statistics?

A. Yes; that is what we prepare the classification for. That is exactly the object of the classification.

Q. The classification is the only cost relation that there is in fixing the adjustment between State and interstate, is it not?

A. I don't believe I quite catch the object of your question.

Q. Well, no matter what the object of it is, if you understand the question.

A. I only want to answer it properly. I can answer it two ways.

Q. Answer it both ways.

A. The cost relation as between State and interstate rates is the classification. That is the cost relation.

Now, there is another cost relation as between State and interstate rates and that is where your State rate becomes so low that the railroads do not feel they can meet that low rate and carry the traffic.

Q. Then they just go out of business?

A. Yes; as the Cotton Belt has done in quite a number of cases. There is quite a little business to Little Rock based on State rates, that they don't handle.

Q. The only way you can adjust any cost relation between State and interstate rates, so far as you know, is through the classification of the various commodities and classes?

A. That is the method of arriving at the cost relation.

Q. So far as you know, that is the only method?

A. It is the only method so far as the class rates are concerned, yes; but there is quite a large list of commodity rates.

Q. How do you adjust them?

A. Those are adjusted as near as we can do so.

Q. Just by intuition?

A. And judgment—"guess," I believe you call it.

Q. Mr. J. M. Johnson called it "guess." I did not call it that. You have the average cost per ton per mile on all your commodities, and then when you have that, in fixing rates you exercise your judgment (or, as Mr. J. M. Johnson says, exercise your guessing power) to determine what the rate ought to be?

A. No; not altogether. To determine what the minimum rate ought to be, but not what the rate ought to be, because there are a great many other conditions that fix that rate.

Q. But that is the only way you get a cost relation—the way in which I have indicated?

A. That is the only way you prevent yourself from handling traffic which you should not handle." (Tr. pp. 1681-2.)

Mr. C. E. Perkins, of the Iron Mountain, in answer to a question as to whether there was any relation or connection between State and interstate rates, said:

"There is a very close relation as between interstate rates and intrastate rates; not only is that true with reference to the interstate and intrastate rates in Arkansas, but in a great many of the other States, practically all States that fix the rates to and from the borders of that State.

"The advance in Arkansas intrastate rates which was made prompted a similar advance in our interstate rates. In other words, when the rates locally in the State of Arkansas were raised, from West Memphis or Bridge Junction, which is directly across the river from Memphis, our rates interstate from Memphis into Arkansas were readjusted, were raised. The raising of the Memphis rates practically affects all of our interstate rates to Arkansas. Cairo

is advanced differentially over Memphis; St. Louis is advanced differentially over Memphis. In other words, there is a relation as between the rates which we carry on interstate business from St. Louis to Arkansas as compared with the rates from Memphis.

"This is brought about by the fact that Memphis and St. Louis are large distributing centers and we are forced, in order to carry out a parity of rates which will allow the free distribution of business, to keep those points on a parity; that is, on a relative basis.

"That is true also of the business passing through those gateways coming from beyond.

"Now, when we have our St. Louis rates fixed, the rates from practically all parts of the United States from which through rates are carried into Arkansas, are fixed differentially as compared with the St. Louis rates. In other words, the rates from Kansas City bear a certain relation to the rates from St. Louis. The rates from all Kansas points are fixed with relation to the Kansas City rates. The rates from Chicago to Arkansas are fixed on a differential over St. Louis. The rates from Pittsburg, Pa., are fixed on a differential over St. Louis. The rates from what we call the Fox River District, which is Wisconsin, north of Chicago and Milwaukee, are fixed on a differential over St. Louis. The rates from New Orleans to points in Arkansas, Little Rock and South, are in practically all cases the same as St. Louis.

"So, when we change the rates from Memphis on account of the changes which are made in the intrastate rates in the State of Arkansas, we practically change the entire rate adjustment affecting interstate rates to and from Arkansas.

"This condition is not confined to the State of Arkansas, but it applies to practically all States.

"As an example, a short time ago the State rates in Kansas were changed, being reduced on grain locally within the State of Kansas. The change in those grain rates affected practically every rate on grain which we carried from Kansas to interstate points." (R. pp. 599, 600.)

In his cross examination this occurred:

Q. I want to know just what you meant by "close relation between interstate and intrastate rates?"

A. I mean by close relation, that the interstate rates or the intrastate rates, where not governed by State Commissions, bore a relation one to another and as a general proposition where one is changed the other must be.

Q. Now what relation should they bear one to the other?

A. There is no fixed relation. If you mean on percentage?

Q. I mean on the rates themselves. You have spoken of this parity of rates and the close relation of rates; now, I want to know just what that relation should be?

A. I can not give you any definite basis or any definite relation which they would bear. However, there is this relation, that when one changes the other is almost always bound to change. I will not say always, because there are lots of exceptions; but the general rate basis applicable into a given State depends very largely if not entirely on the State adjustment.

Our rates, as an example, into the State of Texas from interstate points, are based entirely on the rates as fixed by the Commission of the State of Texas.

Q. What are you going to do when your road crosses two States and there is a great difference in the rates in those two States? Take Arkansas and Louisiana: Louisiana, I believe, has the highest rate of any State east of the Rocky Mountains and west of the Mississippi River; and Arkansas has lower rates than Louisiana. You have a line running between those two States. When you come to adjust these relations between the two what are you going to do with your State rates?

A. They have to be graded from one to the other.

Q. How do you grade them? That is what I want to get at, the actual facts.

A. We sit down with paper and pencil and take all the conditions that enter into rate-making. There may be a dozen of them. And fix those rates. In other words, rates may be fixed by an altogether different road—for instance, the rates from Memphis into the State of Arkansas are not fixed by the Iron Mountain road to any very great extent.

Q. That is a commercial condition that is controlling and not the relation between State and interstate, isn't it?

A. It is the condition controlling our railroad.

Q. I understand that. You say now this close relation, this Siamese twins relation, between State and interstate—and I am trying to find out just what the bond of union between the two is as an actual fact?

A. The bond of union is this: As between Arkansas interstate rates and Arkansas intrastate rates, if you want me to take up that feature of it I will and explain it.

Q. I want you to explain what this relation is. How would you fix an interstate rate based on an intrastate rate or *vice versa?*

A. The rates fixed by the intrastate rate in Arkansas fixes necessarily the rate from the border points." (R. pp. 620, 621.)

Then he wanders into illustrations.

Mr. Perkins was recalled in rebuttal and said:

"Q. You have used the term 'relation between State and interstate rates' quite frequently in your testimony here, Mr. Perkins; I wish you would explain just what you mean by that.

A. By "relation between State and interstate rates" I mean that our interstate rates are dependent upon the rates as fixed on State traffic.

Q. I do not believe I quite catch that, Mr. Perkins; do you mean in all your remarks in your preceding testimony as to the relation between the State and interstate rates the effect that the State rate has upon the interstate rate?

A. By saying hat there is a relation between the State and interstate rates I mean that the State rates, as I have said, affect to a greater or smaller degree the interstate rates. In that way the relation exists.

Q. Just what is that relation?

A. That relation varies. It is the subject of practically all of the testimony I have just given with respect to our rates from Memphis to Arkansas points.

Q. As I understand your testimony on that, it was to the effect that the Arkansas Commission rates had, in a measure, controlled the interstate rates to and from Memphis; is that correct?

A. That is correct.

Q. You mean by "relation between State and interstate rates" the controlling effect of the State rate upon the interstate rate?

A. I mean by the relation between State and interstate rates, as an example, where the State rates are reduced it will invariably cause a reduction in our interstate rates, possibly not to exactly the same degree; and where they are advanced it will permit of a smaller advance in the interstate rates.

Q. You say 'probably not in the same degree;' to what degree would that advance be?

A. That would depend entirely upon conditions." (R. p. 1631.)

Again he said:

"Q. Mr. Perkins, I do not quite understand this statement in your testimony at page R 23:

"In case where the interstate rates are shown to be the same to the points mentioned in the chart, the Memphis to Little Rock rate has been applied as a minimum, these minimum figures applying only to the station directly south and west of Little Rock, which it will be seen were selected by the State to disprove our basis."

What do you mean by that?

A. I mean that you have selected a group of stations to which, on account of the conditions which I have mentioned we have in one or two cases a blanket basis of rates; and you picked out that as about the only place you could find in Arkansas to prove or disprove our general theory.

Q. What do you mean by your "general theory?"

A. The relation as between State and interstate rates.

Q. What relation? Cost relation, trade relation, or political relation?

A. The relation of the rates in and of themselves.

Q. What do you mean by the relation of the rates in and of themselves?

A. The relation as between State and interstate rates.

Q. Do you mean the proportion that one rate will bear to another one?

A. I mean the bearing which one rate has on another rate, as a matter of fact.

Q. Control, you would be more apt to say—the control of one rate over another one, rather than the relation?

A. Yes, sir.

Q. That is what you mean by that statement?

A. I think the word relation defines it better.

Q. You are discussing there the relation of the effect of one rate on another.

A. The effect of the relation of one rate to another naturally affects the two; yes.

Q. You take the rates in Arkansas that are less than the Commission's rates and what would you say as to that relation or control of the Commission's rate as to them?

A. The basis which I outlined yesterday as governing that part of our line as applied to State rates brought about that result at that time.

Q. That might bring it to the State level, but how could that bring it below the State level?

A. For the reason that in that particular case we used a minimum figure, which was the Memphis to Little Rock rate, 70 cents first class.

Q. On account of commercial conditions?

A. Yes.

Q. I believe Mr. Bragg gave instances of the Memphis interstate rate being less than the State rate to points on the White River branch and probably other points; do you recall that testimony?

A. Yes, sir.

Q. It was commercial conditions on that line that brought those rates down under the Commission's rates?

A. No, sir.

Q. What was it?

A. Competitive conditions." (R. pp. 1664, 1665.)

Mr. Frank Nay, Comptroller of the Rock Island System, testified:

A. "Well, for the revenue basis to be the proper measure, excluding in this consideration the addition of anything for increased cost, the State rates should be enough higher than the interstate rates to balance that excess of cost which operating men say exist in connection with State business over interstate business and if the State rates were not sufficient to produce that revenue, the revenue basis would be faulty to that extent. And if they were too high and so much higher than interstate rates of course it would be faulty the other way.

Q. The point of that testimony to which I have just called your attention, is this: There was not a proper relation between State and interstate rates during the period we have under inquiry (that is 1907), and if that is true then the revenue basis would not be a proper factor with which to apportion the expenses, would it?

A. Well, it would be an accurate factor, but being, in my judgment, the best that is known, it would be the proper one. I think in the first question you have the word "accurate;" it is not an accurate factor.

Q. It will fluctuate according to the fluctuation between State and interstate rates?

A. Yes, sir.

Q. And it will, of course, be inaccurate to the extent that the proper relation does not exist between State and interstate rates?

A. Yes, sir; I think that is true." (R. p. 660.)

Mr. Nay's evidence on the revenue theory, and in fact the plaintiffs' whole case, is summed up thus:

"Q. If there is a larger profit in the intrastate rate than in the interstate rate, owing to competition that largely controls the interstate rates, wouldn't that fact, the difference in the profits on the two rates make it unfair to use the revenue, intrastate and interstate, to measure the expenses of operation with?

A. Of course, in the first place it would depend on what basis was used in determining the profit was larger in one case than in the other. But if that could be absolutely determined beyond any question of a doubt, which is an impossibility, I think, then of course the revenue basis would be faulty to the extent that difference existed.

Going back to the same statement again, that the revenue basis is not a perfect basis, but is the best known basis at this time.

Q. It seems to have several faults, doesn't it, Mr. Nay?

A. These faults are really the same fault under different names, I think.

Q. Not under different names but under different circumstances; isn't that more nearly the case than under different names?

A. My idea in making the statement that they seem to be the same fault was that the two rates, intrastate and interstate, seem to be out of proportion to each other, and that is what produced this unfairness that is spoken of. If they were in exact proportion all the time, the revenue basis would be a perfect basis.

Q. And if it represented the cost of the service? You would have to have that also?

A. I presume if they were in proper relation to each other they would represent the relative cost of the service. When I say "in proper relation to each other" I mean in reference to the cost of the service.

Q. Some of these traffic men use that term in an entirely different sense. I think your use of it is correct, but you will see from

the testimony the others use it as having a proper adjustment to the commercial conditions. A just rate of one trade center with another trade center. That is the reason I was particular in calling your attention to it. You mean by it a proper relation of the cost of the service; isn't that right?

A. That is what I had in mind.

Q. That is what you had in mind in your testimony generally, I assume.

A. The proper relation?

Q. The proper relation of cost, you mean?

A. Yes, sir; the proper relation in regard to the cost." (R. p. 668.)

The foregoing, saving repetition, is practically the full evidence of the plaintiffs on this subject.

(3) THE RELATION OF THE INTERSTATE AND INTRASTATE RATES.

Defendants' Evidence.

The intrastate revenue used as the factor with which to divide property and expenses for the period under inquiry was Standard Distance Freight Tariff No. 3, or, to be more accurate, the rates which in June, 1908, were republished under that style. With minor exceptions, the rates had been in force several years, and really the tariff in force during the period of inquiry was No. 2, although the witnesses all speak of No. 3 but it was only published in 1908, after this period of inquiry. As there were no substantial difference between No. 2 and No. 3, we will follow the witness and speak of it as No. 3.

Mr. Watson, Assistant General Freight Agent of the St. Louis Southwestern Railway, in his direct testimony, made frequent critical allusions to these rates, and on cross examination we developed fully his criticism of it as not being properly constructed. As his testimony deals in some very specific instances, it is quite tedious to follow:

Bar iron and baskets are favorite illustrations of traffic men as to the relation of rates and cost of service, and the difference in classification as controlling rates. Using these common illustrations, taking Commission rate for 225 miles, the average interstate haul, in order to get the relation in rates between the State and interstate.

Mr. Watson was asked to give these. Bar iron was found to be 16 cents and baskets, which take four times the first-class rate, was $3.08. Mr. Watson says this is not the proper relation; the bar iron ought to be 37½ cents instead of 16 cents.

"That relation in that particular tariff is not a regularly constructed one. The figures are not as near as should be; in other words, fourth-class ought to be somewhere in the neighborhood of 50 per cent of first-class, and the figures are not so constructed in that tariff."

Q. Then that tariff is not properly constructed so far as the relations go?

A. That is my understanding." (R. p. 566.)

This was irrespective of whether too high or too low; merely the relation. He says the undue relations in the Commission Tariff was one of the complaints against it, and was asked to give other instances. He says practically all the L. C. L. commodity rates, giving bagging and ties to illustrate, but he said it was a small movement. (R. p. 566.)

He was asked to give heavy movements, something that went to the revenue-producing feature, and in response instanced:

Wire and nails, 16 cents; should be 37½; sugar, rice and molasses, 23 cents; should be 37½; canned goods, 23 cents; should be 37½. These in L. C. L.

In carload rates, he says the conditions are worse: Cotton seed, 8 cents; should be 15.

Lime, outside of lumber, he says is about as large as any movement; and it is 8 cents, and should be 18 cents. Lumber is 8 cents and should be 18 cents. This for a distance of 225 miles; and he admits that it is also 18 cents from Lake Charles, Louisiana, to St. Louis, Missouri, a distance of four or five times that length.

"Q. I infer from your analysis of that, Mr. Watson, that you are not enamored of the Standard Distance Tariff No. 3, as a scientifically constructed tariff?

A. I don't believe the Standard Distance Tariff, No. 3, was ever represented as a properly constructed tariff. I never heard anybody so represent it.

Q. Do you think it represents the cost of the service?

A. I don't think so; no.

Q. Nor anywhere near it, I would infer from your answer?

A. The result from the application of it would indicate not.

Q. It would not be a very safe measure, then to use to determine the cost of service in the State of Arkansas?

A. I don't think you can use any tariff to determine the cost of service, Judge. I don't think you could use this one (indicating) to determine your revenue on a proper basis." (R. pp. 565-569.)

The lumber rate might be too low, the basket rate too high; these are not the present questions, but do the State rates bear such relation to the interstate that the respective revenues can be used to measure the respective expenses?

Taking the Iron Mountain interstate tariff as standard of relations of one rate with another for the average interstate haul, Mr. Watson is quite emphatic that the Commission Tariff rates are not in proper relation to each other, and necessarily not in proper relation to the interstate.

If the rates of themselves were low, it would assign less expense to the State than if high, but the revenue from these rates is upon

one road 98.18 per cent higher intrastate than interstate per ton per mile, and, upon the other, 141 per cent; and this is not a question of too high or too low, but one of relation, a necessary factor to give value to the revenue basis.

This testimony, exhibiting the actual relation of rates under which the traffic moves, can not be condensed, and must be given in full.

Nonrelation Graphically Explained.

(R. p. 1468.) "Q. Mr. Hamilton, there has been a great deal said in this testimony about the parity between the State and the interstate rates, the relation that exists between State and interstate rates. Have you made any examination as to that parity or relation, or whatever it may be called, existing between State rates and interstate rates?

A. Yes, sir.

Q. Give us the results of some of your illustrations?

A. Mr. Watson, and perhaps Mr. Perkins, or Mr. Flippen, one of the gentlemen from the Traffic Department of the railroad interested here, as I recall it, said that the Arkansas Distance Tariff issued by the Commission dominated the rate from Memphis into Arkansas points, and that the Memphis rate was the bridge toll higher. That is, to get a rate from Memphis to an Arkansas point, they added a bridge toll to the distance tariff from Bridge Junction on the west side of the river, opposite Memphis.

Taking that proposition first, I have made a graphic chart covering the rates from Memphis to the line of the Iron Mountain, extending south from Little Rock, some seventy miles, to Arkadelphia (actually to Gum Springs, the station beyond) and commenting upon the statement that Memphis rates were based on the Arkansas rates, plus a bridge toll—that they were made that way—I found that the first class rate ran level across the chart—

Q. That is interstate?

A. Yes, sir.

That is, that the rate is 70 cents from Memphis to each of these 27 stations, shown on this chart, which are 70 miles apart. That is, the most northerly one is 70 miles from the southern extremity of the route.

I found the Commission Distance Tariff beginning at 60 cents and mounting step by step until it reached 76 cents, a fluctuation of 16 cents.

Q. Owing to the distance?

A. Owing to the distance. It is graduated according to the distance. The rates are made in five-mile graduates.

The rates published by the railroads from Memphis to these points, on first class, are absolutely level. That is, the 70-cent rate applies to the entire group.

The distance tariff rate, which I have compared with the railroad interstate rate, is the rate from Bridge Junction, and would be,

according to Mr. Watson's statement, the railroad's rate less the bridge toll. The bridge toll does not fluctuate. There is no distance element in it. It is an arbitrary toll. So that if the interstate rates published by the railroads were based directly on this State rate, they also should fluctuate. As a matter of fact, the chart shows they do not.

The same is true of second class, which is absolutely level across the chart, on the interstate rate, and goes from 53 to 68 cents in the Standard Distance Tariff of State rates.

On third class, the interstate rate goes 37 miles before it begins to climb, and then climbs, the last time 33 miles, some six points; while the State rate begins at 45 cents and climbs in the direct relation to the first and second class State rates until it reaches 57 cents at the last station in the group.

The fourth class interstate rate runs 52 miles level before it begins to climb, although its predecessor, the third class rate, began to climb after 37 miles, and it ultimately climbs 4 cents; while the State fourth class rate, which is now, as it starts with the first station, a cent higher than the interstate fourth class, although the first, second and third class interstate rates begin on a higher level than similar State rates.

This State fourth-class rate climbs all the way and is graduated according to distance, starting at 37 and reaching 43.

Now, on Class A, which in these tariffs is higher than fifth class, and is therefore mentioned first, we find the interstate rate again absolutely level, although some rates between it and second class, which are absolutely level, have been graduated.

We find the State Class A rate graduated according to distance.

The same is true of the interstate fifth class rate. It is level, while the State fifth class rate is graduated according to distance.

The State Class B rate is graduated almost exactly, relatively, to the other State rates, while the interstate Class B rate goes some 37 miles before it begins to rise.

The State Class C rate is graduated, as is also the interstate Class C rate. There is some resemblance to the graduation on that one rate.

The same is true of the Class D, on the State, but not the interstate. It travels level for 59 miles before it begins to rise.

The two Class E rates are most relatively graduated.

I should say that it is apparent there that there is no relation in that set of rates, between the State rate and interstate rate, for the reason that while the interstate in most instances is level—that is, is the same to the first station as to the last station in a group, the extremes of which are 70 miles apart, the State rate is graduated according to distance.

Now, as to the other phase of it, as to there being an internal relation between the interstate rates·

Something has been said here, for instance, that the fourth class

should be a certain percentage of the first class, if rates were scientifically made—take these interstate rates: We found first-class absolutely level; second-class absolutely level; the third class graduated; the fourth class graduated; Class A absolutely level; fifth class absolutely level; Class B almost so, rising at the last two stations on the group.

If there is a relation between the level rates, there certainly can be none between them and the graduated rates.

I am speaking from the chart—in this chart we have shown the names of the stations to which the rates applied.

Q. Have you carried any commodities on that chart?

A. Nothing but class rates on this chart. Down the side we have shown the rates per hundred pounds, in cents; each square across the chart represents a station; the graduations are shown in that way—

Q. I wish you would attach that chart as an exhibit.

* * * * * * * * *

See exhibit "C-1."

Q. Have you made any comparisons of the relation to the St. Louis rates?

A. These are St. Louis rates that I have in this (indicating) chart.

On the other chart we have shown only class rates and have shown the State and interstate rates on the same chart; that is, on the same page of the chart.

Here we have shown both class and commodity rates and have shown the interstate rates on one side and the State rates on the other.

The St. Louis rates, of course, are interstate rates, and are for the whole distance from St. Louis to these points in Arkansas indicated on the head of the chart.

For purposes of comparison, we have set against them State rates which apply for the distance that these interstate rates would cover, in the State of Arkansas. That is:

Here is the rate from St. Louis to Arkadelphia. The haul in Arkansas on that is 226 miles. Against that I have set over here (indicating on chart) the 226-mile distance tariff rate.

Inasmuch as the division of the rate is not in question, but only its relation, and, further, inasmuch as the Iron Mountain, in dividing the revenue derived from these St. Louis rates, divided on a track mile basis, the comparison holds good for any mile that the freight travels over.

Q. Now, please explain what you have on that chart.

A. The first-class rate from St. Louis to station—from Asylum in Arkansas, which is the first station south of Little Rock, to and including Gum Springs, the first station south of Arkadelphia.

The first-class rate is $1 to all those stations from St. Louis.

Q. That is represented by a level line?

A. Yes, sir; and so marked on the chart.

The State rate for the same haul in Arkansas is set opposite that and graduates from 64 to 77 cents.

Q. Graduating according to distance?

A. Yes, sir.

The second-class rate from St. Louis to these points is 85 cents, to all of them—a level line across the chart.

The Distance Tariff State rate graduates.

The third-class rate, interstate, travels 37 miles before it is graduated.

The third-class rate, State, closely follows the first and second-class rates, State, graduated all the way.

* * * * * * * * * * *

Q. You mean interstate?

A. No; the interstate does not. The State rate preserves, in a measure, the relation, but the interstate does not—two of them are flat and the next one is graduated on the interstate.

The fourth-class interstate rate runs out a distance of 214 miles before it begins to rise.

The fourth-class State rate is graduated all the way, although not so markedly as its predecessors, the other three rates.

The fifth-class rate, interstate, is absolutely level.

The fifth-class rate, State, is graduated. Not as markedly as its predecessor, but graduated according to distance, nevertheless.

The Class A rate, interstate, parallels the fifth-class rate and is absolutely level.

The Class A rate, State, is graduated.

The Class B rate, interstate, does not begin to rise until it has traveled 37 miles.

The Class B rate, State, is graduated in the first eight miles and goes up—that is, the first ten-mile group.

The Class C rate, interstate, runs 40 miles before it begins to graduate.

The Class C rate, State, is graduated exactly as the Class B rate, beginning in the first ten miles.

These other rates speak for themselves, and show that while a great many of the class and commodity rates, interstate, are blanket rates or level rates, the State rates are all graduated, preserving a closer internal relation between the various State class and commodity rates than there is preserved between the interstate, and lacking a proper internal relation of each, I fail to see how there can be any relation between the two sets of rates.

* * * * * * * * * * *

Q. Have you some comomdity rates there?

A. The comodity rates are on agricultural implements, less than carload. That is an absolutely level rate, interstate. In fact, it is

really the second-class rate, although it is published as a commodity rate. The same rate, State, is graduated exactly; that is, the second-class rate follows it all the way, step by step.

Q. That is, a relation of a flat rate with a graduated rate?

A. Yes, sir.

The carload rate on agricultural implements, interstate, is graduated all the way, but the less than carload rate on these implements is a flat rate.

If the relation between carload and less than carload, interstate rate on implements, at the first station, was correct, then the relation at the last station is distorted, because there is not a level rate on the less than carload, while there is on the carload. To put that into figures:

The less than carload rate from St. Louis, on agricultural implements, say to Mabelvale, Arkansas, is 85 cents. The carload rate is 30 cents. Now we go to Arkadelphia, and we find the less than carload rate still 85 cents, but the carload rate has gone from 30 to 39 cents. In either one of those cases there is some distortion of relation.

Q. I expect there is a physical condition down there that makes the handling of carloads very much more expensive than less than carloads over that particular piece of track?

A. I should say that there was some commercial necessity for a lower carload rate to some of those points near Little Rock that there was further away. What it is, I do not know, but that may be the cause in the change of the relation.

Now, comparing carload and less than carload, and showing that this tariff is not related, the same statement holds good on "bagging and ties."

The carload rate is a level rate of 19 cents to each of these 27 stations, while the less than carload fluctuates from 39 to 46 cents.

If there is a definite relation, whatever it is, between that carload and less than carload "bagging and tie" rate, it is not apparent at just which of these two points that relation is." (R. pp. 1468-1872.)

He gives further illustration on canned goods, L. C. L. and C. L., and salt, C. L. and L. C. L. In this case a local rate C. L. and a fluctuating L. C. L. rate on the same. These are all shown in exhibit D-1, the tariff numbers all given. (R. p. 1473.)

The testimony of Mr. Perkins, that this territory was exceptional, has heretofore been copied.

To meet Mr. Perkins' statement, this subject was further investigated, and in surrebuttal this additional evidence, along the same line is adduced, commencing at page 2250:

Q. Mr. Hamilton, you put in evidence exhibit C-1, which is a chart showing and illustrating certain rates, State and interstate, on the line of road south of Little Rock. Mr. Perkins, in discussing that, at page 24, said, after explaining the rates set forth in your chart:

"In other words, the State has picked out a comparatively small territory in Arkansas where this condition exists, to try to prove there is no relation between our State and interstate rates; while, as a matter of fact that comparatively small territory is an exception to the rule; although in that territory there is the relation between State and interstate rates as I have explained."

I will ask you if that is a correct statement that you have picked out a small territory there to prove this fact, and that that small territory is the exception to this rule.

* * * * * * * * *

A. First, on the question of the section of the line covered by exhibit C-1, being the only portion of the line in Arkansas where the conditions illustrated in that chart were extant during the period of our inquiry, I would say that I have taken the same tariff naming the interstate rates from St. Louis to points in Arkansas, and have found that a similar condition exists on every section of the line which is covered by nine additional charts of similar character to exhibit C-1, which I have prepared.

Q. Explain those charts, Mr. Hamilton, so it may be understood.

A. The charts are numbered from one to nine, and, to indicate the extent of the territory covered by them, I have prepared as a recapitulation or summary of the charts an outline map of the Iron Mountain mileage in Arkansas, which appears first in the exhibit.

The portions of the Iron Mountain line colored in red are portions covered by the charts attached to the recapitulation.

The numbers shown opposite these red sections of the map are references to the charts which underlie it.

The mileage covered by the charts is 529 miles, including the territory covered by exhibit C-1, which itself covered seventy miles.

Those 529 miles are 39 per cent of the total Iron Mountain mileage in Arkansas.

The charts are similar in nature to exhibit C-1, but cover different territory.

Q. Explain the principle involved in this map and the charts.

A. Take one, for example. Take chart 5, attached to the exhibit, the stations to which the rates apply, cover 79 miles on the White River division, beginning at Fitzgerald, just north of Newport, and running to Cresswell. The red lines indicate the interstate rates from St. Louis to the various stations shown.

The graduated colored lines indicate the State Distance Tariff rates for the same mileage in Arkansas as would be covered on the haul from St. Louis on the through rate from St. Louis to these points.

It is not intended to compare the rates themselves in dollars and cents, but their relation one to the other.

To explain: First-class rate from St. Louis to Fitzgerald was 80 cents. First-class rate to Cresswell, 79 miles further distant (figur-

ing the short-line mileage via Diaz Junction) is also 80 cents. And the rate is 80 cents to all intermediate stations.

The first-class State rate from the Missouri State line to Fitzgerald is 43 cents. The first-class State rate to Cresswell, the most northerly station, is 56 cents, a variation of 19 cents, which is made gradually from station to station or in groups of five to ten miles.

The same is true of other State and other interstate rates.

On this particular chart all of the interstate rates with the exception of Class E, are the same to the first and the last station on the chart.

Class E runs at the 15-cent level for 44 miles and at 16 cents the rest of the distance, or 35 miles.

There is one chart to which I wish to call particular attention; that is No. 2, covering 80 miles on the Helena branch; the first station being Jolly, just south of Knobel, and the last station shown on the chart being Wynne, the junction of that line with the line from Bald Knob to Memphis, the distance between stations being 80 miles.

The first class interstate rates begin at 70 cents and is 70 cents to the first three stations shown on the chart.

The next station the rate is 71 cents.

To the next two it is 72 cents. And then to all except the last two stations on the chart, or a distance of 48 miles, it is 73 cents level, raising one cent to each of the last two stations.

The second and third class interstate rates are absolutely level, being the same to the first station as to the last.

That is all true of the fourth class rate.

Class A from St. Louis recedes.

That is, the rate to the seventh station south, or Paragould, has dropped one cent, although the distance has increased.

That is true of Class B, the rate has dropped two cents when it reaches that station.

And of Class C, which has dropped two cents. And Class D has dropped two cents. And Class E has dropped three cents.

That decrease in the rate remains effective for 19 miles, and then the rate resumes its former level and goes on on a parity with the first and second class rate.

On this same chart the State rates are graduated according to distance, the rates increasing in five or ten mile groups, according to the State Commission Tariff.

Q. This was based on the rates in effect during the last half of the year 1907?

A. This chart was based on the interstate rates in effect during the last half of 1907 and also on Standard Tariff No. 3.

The map, which is a recapitulation, bears a typewritten statement practically the same as what I have given here.

Q. The balance is made up practically in line with the explanation you have given?

A. Yes, sir.

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The exhibit referred to is marked "Defendant's Exhibit L-1." Two of the charts are reduced in size and reproduced herewith and found on opposite page to illustrate this testimony.

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Q. Mr. Hamilton, at page R-7, Mr. Perkins, in discussing the rates to Texas common points, in answer to some testimony of Mr. Ludlam and exhibits filed, uses this language:

"The rates to Texas common points are not made entirely from St. Louis. In many cases the rates are made from the territories east, and rates are then fixed from St. Louis on differentials under the rates so fixed from Eastern territory.

"This is due to the fact that the further east we go the more keenly do we feel the water competition of the Steamer Lines from New York to Galveston and Texas City. In adjusting our rates to Texas we attempt to arrive at a rate which will yield an average return. In other words, we do not figure on the rates to Paris, in the northern part of the State of Texas, nor on the rates to San Antonio, in the southern part of the State, but a rate which applied to the entire territory would yield an average return."

I wish you would state whether you have found that to be correct, and if you think it is incorrect, if you have prepared a chart illustrating how those rates are made different from the way Mr. Perkins understood it?

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A. The rates are made in the way which Mr. Perkins says they are made. The tariffs show that.

But their division between the carriers hauling the freight results in greatly varying rates for the haul in Arkansas.

Q. You mean greatly varying revenue rather than rates, do you not?

A. Greatly varying revenue, assuming the business moves under the rates.

Q. What I am particularly calling attention to is the average of revenue. As I understand, that is made up by the rate and the division?

A. Yes, sir; that would be governed by the average movement of freight also.

Q. That is true. Now proceed with your explanation.

A. I have prepared a chart which covers the rates, or the Iron Mountain proportion of the rate in Arkansas on business from Chicago and Pittsburg and their surrounding territories, and St. Louis, to 15 stations taken at random from the map of Texas:

The stations named are shown as taking Texas Common Point rates and I have selected the first class rates, for purposes of illustration.